

VALLEY FARMER.

A Monthly Journal of Agriculture, Horticulture, Education and Domestic Economy, Adapted
To the Wants of the People of the Mississippi Valley.

VOL. VI.

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The Valley Farmer.

WOODWARD & ABBOTT, PUBLISHERS.

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ST. LOUIS, MO.

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Editor's office and Printing office, in Old Postoffice Building, north side of Chesnut street, between Third and Fourth streets, entrance on Old Postoffice Alley.

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TERMS.

THE VALLEY FARMER is published on the first of each month, each number containing 48 large octavo pages (including 6 pages devoted to advertisements of matters of interest to farmers,) and is offered at the following rates:—

Single copy, one year, - - - - - \$1 00
or copies, \$3; seven copies, \$5; Fifteen copies, \$10.
Payment, in all cases, must be made in advance.—
Payments in gold coins, current bank notes, or postage stamps, may be made by mail at our risk.

AGENTS.—Postmasters and Merchants throughout the country are authorized to act as Agents, and every friend of agriculture is respectfully requested to aid in extending circulation.

ADVERTISING.—Advertisements are inserted in the ADVERTISING DEPARTMENT of the Valley Farmer at the following rates:—One insertion of 12 lines, \$1; each additional insertion, 50 cents; 12 lines one year \$6; each additional 12 lines one year, \$4; one page, one insertion, \$1; each additional insertion, \$5; one page, yearly, \$50; six lines or less, one year, \$4.

New Year.

The *Valley Farmer* presents himself to friends and patrons and wishes them a happy New Year. He would also leave to remind that it is also his birthday. He is now five years old, and he looks of very good size for his age. In fact, he has grown considerably since last year, and as he has now attained such a respectable age and size, great things may

be expected of him for the year to come. He hopes that none of his friends will forget him in the season of making gifts and paying debts—particularly that those dilatory friends who forgot him last year will bear his case in mind at the earliest possible opportunity.

He hopes that all his readers will receive bountifully this year of all the blessings of Providence; that health, peace and prosperity may be their portion, individually and collectively; that their fields may yield abundantly, and that peace and good will may prevail throughout our happy and glorious valley.

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FIFTY BUSHELS OF PEACH STONES.—What a magnificent orchard the man will have. Mr. Greeley, in one of his letters to the Tribune, written during his recent trip to Lafayette, Indiana, says:

Our old friend, H. L. Ellsworth, ex-Patent Commissioner, who has done a large business in converting good prairie into shallow, vicious and half exhausted tillage, has undertook one enterprise which we heartily approve.—He is gathering peach stones, for which he is paying fifty cents per bushel, and will plant fifty bushels of them in the centre of a great prairie which he is breaking up. There they will grow luxuriantly and soon bear, when he will have the peaches gathered and dried by women on shares; and so for four or five years, growing corn or some other crop among them, and thus keeping the land in good condition. Then he will cut down the trees for fuel and have a new growth from the roots. This he believes the cheapest and best way to get fuel where it is most needed, besides producing an abundance of dried fruit, of which there has not been half enough in the country. We trust this enterprise may be crowned with abundant success.

A Short Epistle

To every subscriber to the Valley Farmer.

DEAR FRIEND:—We send you the first number of the 6th volume of the *Valley Farmer*, enlarged, as you will perceive, by the addition of four pages of reading matter, and we think considerably improved in its typographical appearance. During the year a very considerable sum will be expended in providing valuable engravings of useful subjects and animals, and every effort made to maintain the reputation of the paper as one of the best, if not the best, publication of the kind in the Union. We have sent to New York for a set of engravings for a series of stock articles, in which we shall give a history and description of the various breeds of cattle, and also the best crosses of the same. Owing to delays in transportation they have not been received in season for the first of the series to be published in the January number, but it will appear in the February, certain. These articles to stock raisers will be worth the subscription price of the paper twice over. We ask your assistance in four particulars:

First. We hope you will continue to take the Farmer. Notwithstanding all the efforts we have made to extend its circulation, its patronage, though respectable, is not any thing like what it should be, nor what the interests of our vast Valley requires, or can afford. We cannot afford to lose one good subscriber, and hope you will continue to favor us with your patronage.

Second. Can you not obtain a few new subscribers? The times are favorable to such an effort. The farmers are reaping golden harvests, and are beginning to wake up to a sense of the importance of improvement. If you will send us on some names (the more the better) we shall be much obliged. Who will send the most? If any of you have a neighbor who does not take the Valley Farmer, will you, the next time you meet him, be so good as hint that our paper is the largest and cheapest agricultural paper in the land, and the only one expressly devoted to the good cause in the

Mississippi Valley, and that if he wishes to add to his stock of information, prosecute his business successfully, and do his family a favor, he will lose no time in making up a club or sending on his own subscription at once.

Third. If you know of any one who now takes the Farmer, does not wish to take it any longer, will you inform us that we may stop it? If you know of the Farmer coming to your post office to any one who is dead, moved away, or does not take it out of the office will you inform us that we may stop it? If you will have the kindness to attend to these matters for us you will confer a great favor.

Fourth. Will you not occasionally write a communication for the Farmer, on any subject coming within the scope of our designs? We wish to make ours the *farmer's own paper*, and as such to have it embody the opinions and wishes of all the farmers of the land.

Good friends, if you will aid us we will promise on our part to use every exertion to give value and interest to the paper.

Your sincere friends,

THE PUBLISHERS.

Flax and Flax Seed.

We invite attention to the article in the paper from the *Missouri Republican*, the subject of flax growing. In addition to the facts set forth in that article, we would state that in a conversation which we had a few days since with Mr. H. T. Blow, assured us that they were able to run their factory to one third of its capacity only, because they could not get flax seed, although they purchased all they could get, and were willing to contract with farmers for it to any extent. Can not this crop be rendered more productive than it is at present? Would it not be well for our agricultural societies to offer premiums for the best crop of seed and the best crop of fiber? We should be glad to record the experience of Missouri and Illinois farmers with this crop.

We have received a copy of Mr. Wils-

vishes lecture, and shall make some quotations from it in a future number.

True as Preaching.

A good friend in South west Missouri sends us ten dollars for fifteen subscribers to the *VALLEY FARMER* for 1854, and remarks:

"I have taken the trouble to send you the above names purely for the sake of the cause you advocate. There are five hundred other farmers in this section that ought to have your paper or some other like it. It is a little curious to hear how some will excuse themselves for not taking your paper, and at the same time will spend fifteen or twenty dollars a year in tobacco and whiskey, or contribute five or twenty dollars to get up a party political paper, which ought to be the last paper that a farmer should take. But as Dr. Franklin said, experience is a dear school, but fools will learn in no other."

Alfred Lee & Co.

The attention of our readers is particularly invited to the advertisements of this house, No. 14, North Main street. They are already receiving their supplies of goods for the spring business, and from appearances we feel warranted in saying that they will have a stock of implements, seeds, etc., not only of every variety, but of excellent quality.

St. Louis is now so well supplied with agricultural warehouses and seed stores that there can be no doubt that purchases can do as well here as at any other point, east or west. A vigorous competition between the rival houses, ensures to customers prompt attention and low prices.

We shall send this number of the *Valley Farmer* to some individuals who are not subscribers. Such persons need not return the paper to us; but if, after giving it a perusal, they do not wish to become subscribers, let them hand it to some one of their friends or neighbors who takes an interest in the improvement of agriculture.

CORN PLANTERS.—There is no article of farm use that is more asked for at the present time than a good *corn planter*. There are several machines made and sold at the present time, but the same objection appears to hold against all of them—that *they will not plant both ways*. Several individuals to our knowledge, are attempting to make a machine that will accomplish this desired result, and it is quite probable that by the opening of spring there may be a machine in the market that will be just the thing. If so, we shall certainly let it be known. Our friends who have written to us on the subject are informed that there is not at present any thing in St. Louis which will suit them.

Harper's Magazine.

The December number of this popular periodical is the best we have ever read. We know of no better way of spending a small sum than in subscribing for this valuable work. In the great fire which destroyed so much property for the enterprising publishers of this magazine, the whole of the plates, type and sheets of the January number were destroyed, but they announce that the publication will not be delayed beyond a few days. Such enterprise deserves success.

OSAGE ORANGE.—We have a somewhat lengthy communication from Mr. C. R. Overman, of Fulton Co., Ill. on the management and culture of the Osage Orange, which will be published in the February number. To any person who wishes to plant a hedge, it will be worth the year's subscription to the *Valley Farmer*.

Our exchanges, throughout the country, have placed us under obligations for the many favorable notices they have given our paper. Will they do us one more act of kindness, and mention the appearance of the *Farmer* for the New Year.

Extra copies of the *Valley Farmer* will be cheerfully sent for gratuitous circulation to all persons who may desire to use them in that way and will pay the postage on them.

Farewell to the Plow.

The *London Times* publishes a letter from Mr. Mech, one of the most prominent cultivators in England, in which he speaks in highest terms of an implement destined, in his opinion, to drive the plow out of the field. It deserves notice coming from such a source, but we apprehend it will be some time before the farmers in "these ends of the earth" will have done with the plow, and in the meantime we invite the particular attention of our readers to the advertisements of the enterprising manufacturers and dealers in plows, which may be found in our advertising department:

A calm and rigid investigation and computation, have convinced me that the doom of the plow, as an instrument of culture, is sealed, and that the rotary forking, or, as it is wrongly called, digging machine, is the only profitable cultivator. Even with six or eight horses, it is cheaper and infinitely more effective than the plow.

Since the trial of experiments in my "gathering," I have received from one of our North American Colonies, the model of a newly invented machine, which, by a happy and most simple combination of horse and steam power, will—and I pledge my agricultural reputation for it—not only deeply, cheaply, and efficiently cultivate and pulverize the soil, but at the same time sow the seed and leave all in a finished condition. It will also, by a simple inversion, cut and gather the corn, without any rake or other complication; while both in cultivation and harvesting, its operations will be continuous and without stoppage.

The inventor and his machine have, by the government of the district, been placed under my guidance. I have, therefore, on public grounds, and considering the vast importance of the invention in a national point of view, advised the inventors to grant licences for its manufacture at very moderate royalty, to the most eminent agricultural implement-makers in various parts of the kingdom, so that our

agriculturists may be secured by competition against monopoly or inferiority, while the inventor will benefit in proportion to the appreciation of his merits. I shall call together a meeting of the various implement-makers, and in due time my practical friends of the old school—who must not consider me quite insane—will have an opportunity on my farm of forming their own conclusions.

I may venture to state generally that the implement, when complete, will weigh about 20 to 25 cwt., will require a pair of horses, and will represent the power of about eight to twelve, or more real horses.

I trust I need hardly say that I have no pecuniary interest in this matter. The invention has been duly secured.

I am, sir, your obedient servant,

J. J. MECM.

Tiptree-hall, Kelvedon, Essex.

The implement employed for digging, will require one man and one boy only, including the management of the steam-engine; in reaping, the men with the addition of three men to bind as the corn falls into their arms. The men will be carried on the machine.

Wintering Stock.

Taking the last census as the basis of the calculation, and there are at this time about six hundred million dollars worth of live stock in the United States. Their value exceeds that of all the manufacturing establishments in the country, and also exceeds the capital employed in commerce, both inland and foreign. Live stock is an immense national interest, but one which has been sadly overlooked by American Statesmen and writers on public economy. How to winter cattle, horses, hogs, sheep and poultry, in the most economical way, all things considered, is a subject on which an instructive volume might be written. The science of animal physiology sheds much light upon the business of keeping live stock both in winter and summer; and if properly studied in its bearings on this great interest, would add indefinite millions to the income of farmers, and the wealth of the nation. But how can we persuade our readers to study animal physiology?

connection with the production of the flesh of their domestic animals? It is impossible to show them the valuable fruits of any science relating to husbandry before its seeds are permitted to be planted and cultivated in any State in the Union. Nevertheless, as the truths of science and the truths of empiricism never contradict each other, many learn by the latter not a little of the wisdom taught by the former. This science informs us *why it is* that cattle and other animals subsist on less food in winter, and keep in better order, if well stabled and housed, and regularly fed, than they will if subjected to the rigors of cold storms, snow, rain, mud, and irregular feeding. The latter system consumes both forage and flesh needlessly, and, of course involves a prodigious loss to such as follow it. Warmth is the equivalent of food, because food is used in the bodies of all animals to generate what we call animal heat. How far warm stables will save hay, grain, roots, corn-stalks, and other food of domestic animals, is not known; but a number of experiments lead to the conclusion that one-third may thus be saved with advantage to stock. A man at work out in the cold of winter needs double the food that would serve him if he remained idle in a warm room during the winter; and the same is true of an ox or horse. A large share of all the domestic animals do not work, and are kept for the production of flesh, milk, or wool. They need a reasonable amount of exercise to preserve their health, as well as good keeping in the matters of food, drink and shelter.

In wintering, hogs, true economy requires that one should keep no more than will give the maximum of flesh for the food consumed. To keep a pig without his gaining in weight involves not only the loss of food he consumes, but all the injury resulting from stunting his growth. Few are aware of the damage done to young animals by prematurely arresting the growth of their bones and muscles. A stunted pig, calf, or lamb, has received an irreparable injury. You can no more fully make amends for the shock given to the vital functions, than you can give a horse a new seeing eye in the place of one that has been put out of place by violence. No after-feeding of a horse will give him

a new eye; and no good keeping will develop an animal frame perfect in all its parts after it has been stunted in youth. Most farmers attempt to keep too much stock, both in winter and summer, for their food to be manufactured into flesh, dairy products or wool. A few superior animals well fed at all times, yield the largest profit. Of course, stables should be properly ventilated that all animals may have a full supply of pure air. Most stables, and all sheds, give too much of it, especially in cold, wintry weather.

How to SALT PORK SO AS TO KEEP.—Cut your pork up, the sides clear of ribs, six inches wide, let it lie over night. Next day salt as follows: sprinkle the bottom well with coarse salt—Turk's Island or some other good kind; put in a layer of meat set on edge as close together as possible;—Then another layer of salt and so on till your meat is all in the barrel. Then I take common eastern, or lake salt as it is called, and make a brine strong as it can be made; let it stand two or three days and then pour off the clean brine, and put in the meat, and it is safe. Keep it under brine by placing a weight on it. One bushel of coarse salt is enough for the side meat of six good hogs.

After trying almost all methods to keep smoked hams without success, I have for the last four years kept them with complete success by the following plan.

Put a layer of fine dry charcoal, then a layer of hams, then charcoal and so on. No bugs nor skippers, nor mould ever touch them. Keep in a dry and cool place and they will keep perfectly sweet, if in good order when put down.

Exchange.

To PREVENT MILDEW.—Mildew is one of the greatest pests of green-houses and all sorts of plant structures. The following remedy has been tried in the houses of the London Horticultural Society, and it is thought will prove efficacious: Sulphur and unslackened lime put into a tub of water, in which they are quickly and intimately mixed, and the trees and plants syringed with clear liquid after these substances have settled at the bottom.

~~Who will get the Saddles?~~

The publishers of the *VALLEY FARMER*, desirous to contribute to the advancement of Agriculture, and at the same time increase the circulation of their periodical, made at the State Fair in Boonville, on the 6th of October, the following proposals:

To any county in the State of Missouri, in which an agricultural Fair shall be held in the autumn of 1854, that shall send in the largest number of new annual paying subscribers to the *Valley Farmer*, between the 15th of September, 1853 and the first of April, 1854, according to the population of the county (taking the United States Census for 1850 as the basis) we will give the best Ladies' Riding Saddle that can be bought in the city of St. Louis for Twenty Dollars, to be given to the lady who shall exhibit at the Fair five pounds of the best butter. The butter to be accompanied with a written statement of the manner of making, which statement together with the butter receiving the premium, after the award shall be the property of the Editor of the *Valley Farmer*.

To the second largest number under the same regulations, the best Saddle that can be had for Twelve Dollars.

Counties in which no County Fair is held may compete for these premiums, and have the awards made at the State Fair, or at any County Fair contiguous to them.

We hope every subscriber will give this proposal a circulation in his neighborhood, and if possible incite every county to enter the lists for the prize. We send out no traveling agents, but rely entirely upon the friends of Agriculture to increase our circulation. The *Valley Farmer* will from henceforth be the organ of the State Agricultural Society, and all information in regard to that important association and also in regard to the different County Societies may be found in its pages.

We have prepared a book in which will be carefully entered the additions to our list from every county in the State and in the May number it will be announced what counties are entitled to the premiums.

People's Journal.

An Illustrated record of Agriculture, Mechanics, Science, and other useful Knowledge.

We have received the first and second numbers of a large and beautifully printed periodical, with the above title. Each number contains 32 large octavo pages, printed with new type on fine paper; the first number has eight elegant engravings, each covering a full page, beside several smaller ones. To farmers, mechanics inventors, manufacturers, and people of every profession, we have no hesitation in saying, that they cannot invest Fifty Cents to better advantage than by sending for the *Peoples Journal*, and they will receive a repository of valuable information, peculiarly suited to their respective wants. The second number is got up in the most magnificent style. While the reading matter is various and interesting, the same is illustrated by *seventy-two* engravings upon wood the first style of the art. It is altogether a splendid work, and our only surprise is, how they can afford such a magazine of 32 pages monthly, for the low price of fifty cents; but this is their look-out, not ours—or their reader's,—whom we hope they will not have a few in our State, for it is a work really worth extended patronage. Published by Alfred E. Beach, 46 Nassau st., New York.

Old subscribers to the *Farmer*, who receive this number and do not intend to continue to take it, are requested to return it to us by mail, with their own names and the name of their postoffice distinctly written upon it.

Hedging.

See Mr. Brown's advertisement in this issue. We are personally acquainted with Mr. Brown, and believe that whoever makes a contract with him for the planting of a hedge, will have no reason to regret the arrangement.

Agriculture in Minnesota.

The St. Anthony Express gives the following account of the agricultural advantages of that region:

"The corn crop of this region is now being brought into market, and readily brings one dollar per bushel. The fact cannot be denied that Minnesota soil produces better corn than was at first supposed by the early settlers. If Illinois produces seventy-five bushels to the acre, they only get from 25 cents to three bits a bushel, while our farmers can easily realize almost as much again in cash as the Illinois farmer. We have often heard it remarked that an acre of corn requires no more labor here than it does in the most favored parts of Suckerdome.

Oats are now worth 50 cents per bushel. It is needless to say that we always get a good crop in this Territory, and what is equally as good, we always get a good price for it.

Butter made here is worth 30 cents per pound. Cheese 15 cents. There can be but little doubt if some of our western reserve dairy ladies could be induced to emigrate hither, in a few years they would make their fortunes—in more than one sense.

From different farmers residing in this vicinity, who have thrashed their wheat crop of the past harvest, we learn that the average yield is about thirty bushels to the acre. Probably, that quantity will be the product throughout the Territory. Twenty bushels is a fair average in many parts of the Union, and in some of the New England States, agriculturists think themselves fortunate if they can obtain fifteen bushels to the acre. Since the question as to the practicability of this crop in Minnesota, is now so triumphantly settled, we would suggest to our farmers that they take pains to obtain the best seed. There is, doubtless, as much difference in wheat as there is in potatoes, and it behooves us if we would improve our advantages for wheat growing, to look well to the seed we employ."

Correspondence of the Valley Farmer,

SAVANNAH, Andrew County, Mo. }
Dec. 20th 1853. }

DEAR SIR:

Having been a reader of the Valley Farmer for one year, I flatter myself that I have learned some things which I may turn to good account as an agriculturist. But being far removed from St. Louis, where improved agricultural implements might be procured, we are necessarily compelled to use the old or common farming tools. But suppose we would not "persist in their use" if we had the better in the market. Most farmers would like to see an implement in actual use so as to be thoroughly satisfied of its utility, before sending to St. Louis for it. The Valley Farmer gives some cuts and descriptions of farming implements, mills, crushers, &c., but frequently the *price* is omitted which we *want to know* if we feel interested at all. Allow me to suggest that if the price of an implement is given, orders might be sent for it, but not knowing the price, one don't know whether to purchase or not, altho' he may like the article, *provided* the price suited. I see in the December number of the Farmer a cut representing a 'Queen of the South corn Mill,' also an 'Iron dirt scraper.' What is the price in St. Louis and the weight, so we may calculate the freight to St. Joseph. Also the "Thermometer churn," say four gallons,—the price.—Sabin's Washing Machine, price seven dollars, what is its weight? By answering these queries you will confer a favor on the undersigned, and if through the Farmer, probably on others. We are endeavoring to apply to practice some of the teachings of the Farmer and other kindred papers, such as setting out an orchard of apples and peaches, also some grapes,—Believing them superior to pork all the time. Rotation in crops seems to be urged by all practical experienced Farmers. But alas! how little attention is paid to it. It being corn to sell and fatten pork from year to year, when other crops are raised it is not to secure a rotation of crops at all. Hence, I see in this county, new as it is, fields almost worn out, which, doubtless, by rest and rotation, would soon be restored to their

original fertility. But they say "this country washes so." And no wonder, when it is eternally plowed for corn which facilitates the washing.

Wool growing is not much practiced in this part of the State. If it is profitable elsewhere, why not here? Would not a variety of productions of the farm be a surer chance of profit?

Can a variety of the best native pears (small trees) be procured in St. Louis next spring and sent by some merchant to Savannah, and what is the price per tree. Also the Catawba grape suitable to set early in the spring, what are they worth? —and please say of whom they can be procured.

I don't expect to set out a large orchard, but I want a variety of kinds of fruit. Being not an 'old Farmer,' the information asked in this desultory epistle would be of considerable benefit. Success to your efforts to encourage in the Valley of the Mississippi a better state of agriculture.

Success to the conductor of the 'Home Circle.'

Respectfully, your Obt. Serv't.

D. H. L.

REMARK.

There are several matters in this letter which we will talk about next month. Our pages are full now.

Ice Houses above Ground.

Mr. J. W. Wyeth, of Cambridge, Mass. communicates to the *Horticulturist* the following directions for constructing an ice house above ground. Mr. Wyeth states that they are considered in that vicinity preferable to those built under ground:

"An ice house above ground should be built upon the plan of having double partitions, with the hollow space between filled with some non-conducting substance."

"In the first place the frame of the sides should be formed of two ranges of upright joists, six by four inches; the lower ends of the joists should be put into the ground *without any sill*, which is apt to let air pass through. These two ranges of joists should be about two feet and one-half apart at the

bottom, and two feet at the top. At the top these joists should be morticed into the cross beams which are to support the upper floor. The joists in the two ranges should be placed each opposite another. They should then be lined or faced on one side, with rough boarding, which need not be very tight. This boarding should be nailed to those edges of the joists nearest each other, so that one range of joists shall be outside the building, and the other inside the ice-room or vault.

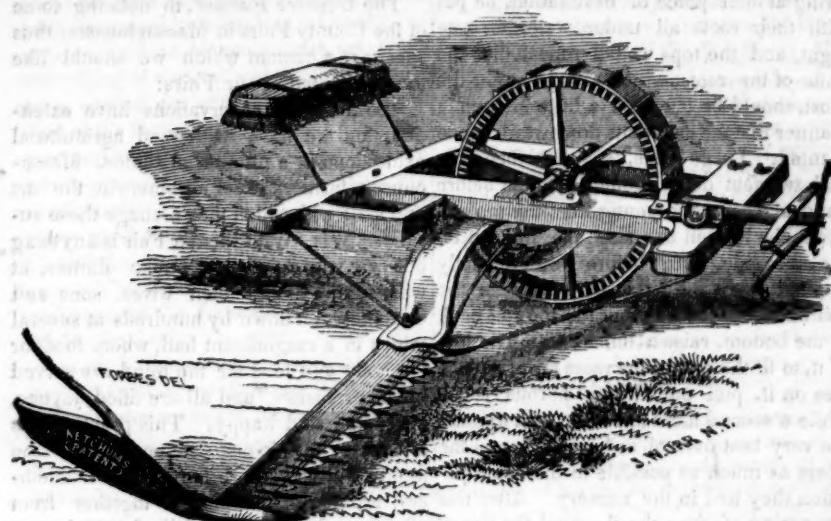
"The space between these boardings or partitions should be filled with wet tan or sawdust, whichever is cheapest or most easily obtained. The reason for using *wet* material for filling the spaces is, that during the winter it freezes, and until it is again thawed, little or no ice will melt at the sides of the vault,

"The bottom of the ice-vault should be filled about a foot deep with small blocks of wood; these are levelled and covered with wood shavings, over which a strong plank floor should be laid to receive the ice.

"Upon the beams above the vault, a pretty tight floor should also be laid, and this floor should be covered several inches deep with dry tan or sawdust. The roof of the ice-house should have considerable pitch, and the space between the upper floor and the roof should be ventilated by a lattice window at each gable end, or something equivalent, to pass out the warm air which will accumulate beneath the roof. A door must be provided in the side of the vault to fill and discharge it; but it should always be closed up higher than the ice, and when not in use should be kept closed altogether."

STATE INSTITUTIONS.—The Deaf and Dumb Asylum has fifty deaf mute pupils, and the session has just commenced. The new building, recently erected by the state will be ready for occupancy in a few weeks. The Lunatic Asylum has 105 patients, which is all that can be accommodated at present. The large additions now being added to the main building, are progressing, and the brick work near-completed. So we are informed by the Fulton Telegraph.

Ketchum's Improved Patent Mowing Machine.



We believe that this machine has given as perfect satisfaction to the farmers of the West as any mowing machine with which we are acquainted. It is capable of cutting and spreading with one span of horses and driver, from ten to fifteen acres per day, of any kind of grass, heavy or light, wet or dry, lodged or standing, and do it as well as it is done with a scythe by the best of mowers. We learn from the agent in this city, Messrs. W. M. Plant & Co., that during the past season this machine has been greatly improved, as follows: 1st. Gearings have been added at both ends of each shaft, overcoming all *cramping and cutting away of boxing*. 2d. The entire change of gear, giving greater convenience in getting at each distinct part for taking the machine to pieces. 3d. A counterbalance is attached to the crank shaft, causing the machine to run with greater ease, and giving it a steady and uniform motion never before attained. 4th. The machine may be thrown out of gear. 5th. The convenience of oiling, each bearing having an oil cup sufficient to hold oil for a long time by stuffing with cotton.

For the Valley Farmer.

St. Charles Co., near Augusta, {
DECEMBER 14, 1853. }

MR. EDITOR:—The uncommon drought of this last season, directly after planting time, was the reason why many of my friends, who got young fruit trees from my nursery last spring, lost a great many of them, though they reached the place of their destination from here in a very short time, and were carefully packed and delivered in the best shape. One lot of trees, sent to St. Louis, were not delivered right away. When I came afterwards myself to St. Louis, I found that the trees had suffered severely; though they were received by the owner, planted out according to my directions, and every one grew off finely and have done extremely well during the season. This induces me to believe that it may spare to many a one a vexatious disappointment and loss of money and time, if I publish through the columns of your widely spread paper the successful manner of planting alluded to.

Trees for transplanting all suffer more or less from the shrinking of their roots and limbs while out of the ground. To recov-

er them the trees should directly after arriving at their place of destination, be put with their roots all under water for one night, and the tops weeded repeatedly; the ends of the roots, which always suffer the most, should be cut back a little in such a manner that the cut points downwards when planted. Large holes, say four feet wide and two feet deep should be made before hand to receive the young tree; the top soil should be laid on one side, the sub soil on the other side. Just before you are ready to plant, lest a hard rain does not take the soil back into the hole put the top soil back in the bottom, raise a hillock in the middle of it, to fit the cavity the roots form, put the tree on it, pull out all the fibrous roots, while a second hand throws in with a spade the very best natural soil, and secures the fibers as much as possible in the same position they had in the nursery. After this lay a ring of the subsoil round the rim of the hole, so as to form a kind of a basin.— Now saturate gradually the soil round the roots with water, filling up every time the vacancies the water produces, with fine, lively soil; then fill in the rest of the soil, and when hot and dry weather sets in, lay litter round the trees three inches thick as far as the soil was worked, to keep the sun from parching it.

I planted my standard trees so deep that the main outlet of the roots is covered eight inches deep with soil, and they have done well. Others plant more shallow. My reasons for planting deep, are to suppress an occasional inclination of the tree to send up sprouts, (all roots showing sprouts are rejected with me in grafting) to render the soil tillable near to the stem, and to secure to the roots a more uniform moisture. It is pretended that a tree planted shallow thrives better. This point might properly be discussed and decided in the columns of your paper. Respectfully yours,

JULIUS MALLINCKRODT

The average yield of tea is about one hundred and twenty pounds to the acre. The average cost of producing a pound of tea is seventeen cents.

Agricultural Festivals.

The *Genesee Farmer*, in noticing some of the County Fairs in Massachusetts, thus speaks of a custom which we should like to see adopted at our Fairs:

"So far as our observations have extended, and we have witnessed agricultural exhibitions in a number of States, Massachusetts farmers excel all others in the art and skill with which they manage these rural festivals. With them a Fair is anything but *fair* without a good public dinner, at which farmers and their wives, sons and daughters, sit down by hundreds at several tables in a magnificent hall, where food for the body and food for the mind are served up in profusion, and all are filled, joyous, instructed and happy. This practice has a most auspicious influence on the family circle. It brings fathers, mothers, brothers, and sisters together from all parts of a country, all of which are polished, to a certain extent, by this social attrition, which is too much denied to the comparatively isolated families in rural districts. They have very few holidays, and fewer social advantages than fall to the lot of the residents of villages and cities: hence it is eminently wise and fitting that our annual Fairs should be made schools for social improvement, where new and valuable acquaintances may be formed, old friendships rejuvenated, and all sympathise more cordially and earnestly with whatever is good in civilized communities. Man should not degrade himself into a mere machine for tilling the ground, with no higher objects in this life than to feed a mortal body, and lay up gold and silver for heirs to dissipate in idleness and extravagance. Cultivation, in its broadest and best sense, needs to be fostered by the owners of American soil. Many a farmer, and many a farmer's wife, have felt the want of that ease, self possession, and happy polish, which inferior minds often possess by reason of having mingled more in cultivated society. Constant isolation off the farm or elsewhere has an unhappy, an anti-humanizing influence on one of the strongest natural functions of the human

heart. By nature we are social beings; and this nature needs proper development in all woman-born.

"This train of thought and remark has been suggested by attending a County Fair at Greenfield, in Massachusetts, at which everything of a social and intellectual character excited our admiration. The President of the Society, the Hon. Mr. Cushman, was perfectly at home at the dinner table, where plates were provided for three hundred guests. We took no minutes of the many good things that were said by Mr. C. and the gentlemen present. All, however felt happy that so many ladies graced and honored the festival by their presence; while the ladies in turn, evinced equal pleasure in listening to the spirited and important discussions on rural topics appropriate to the occasion, carried on with animation, and in a most amiable temper. There was no wine or other intoxicating beverage present; and we are confident there was none the less wit on that account. That better and purer spirit than alcohol in any of its forms—the spirit of good feeling and good will among farmers and all others, is what we desire to commend, and thank the men of Massachusetts for their labor to cultivate."

SAWDUST FOR ORCHARDS.—A year last fall I hauled a load of old rotten sawdust and threw it around my young apple trees. My neighbor over the way is one of those characters who plods on in the same old track that his father and grandfather did, believing that they knew all, and more too. My neighbors said if I put sawdust around my trees I would surely kill them. He said he put manure around some of his trees, and killed them. I told him I would risk it "any how."

I put fresh stable manure around one row and sawdust around the next; around another row I put leached ashes; and the remainder of the orchard I manured with well rotted barn-yard manure, and in the Spring spread it well and planted the ground with corn and potatoes. The result was, many trees grew very luxuriantly, but the trees where the sawdust was, grew the best, the bark being smoother and the trees had a healthier appearance. I will state also, that part of the orchard planted to potatoes grew greatly better than that part planted to corn. The soil clay loam.—*Dol. News.*

From the Missouri Republican.

Flax and Flax Seed.

A month or two ago, we invited the attention of our agriculturists to the subject of the cultivation of Flax, not for the seed alone as has been the case in past years, but for the purpose of profiting by the sale of the fibre. Since that time, gentlemen have appeared in this market for the purchase of any quantity of this article at prices which, it seems to us, must be highly remunerative to the grower. One concern is now ready to make contracts for any amount of the Flax, properly prepared at the rate of \$250 per ton, and this price appears to us so good, that it ought to attract general attention. It can be grown in Illinois, Missouri, Iowa and Wisconsin, and is unquestionably a better crop than wheat or corn, and may be as good as hemp.

It is only recently that the culture of Flax has attracted any notice, except for the seed. Even for this purpose it is known to have been regarded as a profitable crop—the fibre being thrown aside, as of no use whatever. Now, however, when the demand has greatly increased, and manufactures are springing up, in the New England States, of many articles of which Flax is the main constituent, it may become important to our interest to save the fibre as well as the seed. The letter which we publish below is important, as showing how this may be done.

We wish we had room to give the contents of a pamphlet now before us, containing a lecture on Flax, delivered before the New York State Agricultural Fair in 1853, by John Wilson, of Edinburgh, a distinguished gentleman, attached to the Commission of England in attendance at the Crystal Palace, New York. It is a complete history of flax as a plant, and of the uses to which it has been applied in all ages; and of various machines for the separation of the fibrous from the other portions of the straw. Referring to the inventions of Mr. Claussen and of Watts, for the purpose of separating the fibre from the stalk, he yet gives the preference to a process employed by Buchanan, of Scotland, and which seems to have attained every desirable object. Mr. Wilson submits a diagram of the machinery used for this purpose, which is exceedingly simple, and the whole process of steeping the flax and separating it from the stalk, as well as the still further process of drying it, can be accomplished in half a day. Without the diagram, we do not think it worth while to go into a description of the several processes by which this great object is attained. Of the result there can be, however, no doubt.

The supply of flax in this country is altogether inadequate to the present demand, although it has sprung up almost imperceptibly. It now is to become a great product; and it is

for this reason that we desire to call the attention of our farmers to it. Certainly it seems to us, two hundred and fifty dollars per ton for dressed flax, and higher if the quality will warrant it—with the price of the seed, for which the crop has hitherto been exclusively cultivated—ought to make it one of the best crops grown.

For further particulars we refer to the annexed communication, from a gentleman well versed in the subject. Buchanan's machinery has been patented in this country, and rights have already been sold for Wisconsin and Indiana, and are reserved for Iowa, Illinois and Missouri. If other information be wanting we shall be glad to supply it:

In a recent number of the 'Farm and Shop,' an agricultural paper published at Indianapolis, appears a letter addressed to Governor Wright, of Indiana, on the subject of the culture and manufacture of Flax.

It appears that the writer, Mr. Thomas Kimber, Jr., of Philadelphia, has devoted considerable attention for some years past, to the examination of this question, and to an endeavor to introduce the Linen Manufacture into this country, where it as at present wholly neglected. Having succeeded in interesting some capitalists in New England, in the movement, and in organizing a company for the spinning and weaving of flax on an extensive scale, at Fall River, Mass., they are now at a loss for a supply of the raw material; and it was to awaken the attention of the farmers of the West to the importance of the growth of flax that this letter was written by Mr. Kimber, during the course of a tour for that purpose.

He thus relates some of the motives and results of his past exertions:

¶ Finding that the importations of the United States of Linen goods exceeded fifty millions of Yards annually; and that even the universal home manufacture of flax which was customary among our ancestors—and, which though small in detail, was yet great in the aggregate—had almost entirely disappeared, the question naturally arose how this great change had been brought about. So far as the latter subject was concerned, it was at once evident that in all purposes of ordinary household use, cotton had driven flax from the field; and that the farmer had found it cheaper to buy calico and corduroy, and to grow wheat and corn, than to employ his time in spinning and weaving linen fabrics for his household consumption,

As regards the vast increase of importations of linens, it was to be attributed to the growing wealth and luxury of our country, more especially in the great cities, which are springing up with magical rapidity to the very shores of the far off Pacific, and which gather around them all the refinements of an older civilization.

So much for the vast and greatly increasing demand; as to the supply, it became evident that this was maintained with unfailing and equally rapid increase, by the introduction of Steam machinery in every part of the process of the linen Manufacture,

which until recently, was altogether the result of hand labor.

The company alluded to was incorporated in 1852, under the title of the 'American Linen Manufacturing Co.,' with a capital of \$500,000; of which sum \$350,000 have already been paid in, and invested in buildings and machinery. They have no connection with the 'Flax Cotton' movements of the day, and no confidence in their practical success. The letter proceeds to state the capacity of consumption of the Mill, and to give the following facts with regard to the present and prospective profit of the Flax crop:

We expect to consume in the ensuing twelve months, over six hundred and fifty tons of flax fibre (1,300,000 lbs.) and when in full operation, shall consume annually over one thousand tons, or two millions of pounds.—Being about commencing operations, we have already been obliged to import from abroad over one hundred tons at an expense of over \$30,000.

Now in passing through your state and that of Ohio in company with my friend Charles Hartshorne, who has also paid considerable attention, abroad and at home to the flax culture, we have found that many thousands of acres of flax are grown for the seed alone; the stalk and its fibre being entirely wasted and thrown away. We have found that the farmer on an average, obtains about ten bushels of flax seed to the acre, which has yielded him from 90 cents to \$1 25 per bushel, and often a much less price. Now in the first place, this is hardly a half crop of the seed. In Great Britain and Belgium they obtain from 20 to 25 bushels of the seed, besides saving the fibre. The secret lies in the *proper preparation of the ground before sowing the seed.*

If the farmer would give the land a fall plowing, (It is not too late to do it yet,) and leaving it over winter to mellow, then plow it deeply again in the spring, reducing it as fine as possible without too much labor, he would on good ground average twenty bushels of seed to the acre. The flax plant is peculiarly sensitive to such attentions and amply repays them; the roots striking downwards almost as deep and straight, where the ground is open and mellow, as the stalk shoots upward. It is not too much to say that taking into consideration the increased seed as well as the fibre, every dollar so spent in plowing, and pulverizing the ground would yield ten fold in the harvest gathered. The land best suited for flax, is an open rich loam with a clay subsoil if possible.

In the next place, for the fibre: If the farmer would sow two bushels or two and a half to the acre on rich ground so prepared, he would while obtaining twenty bushels of seed, also obtain two tons to two and a half tons of flax straw per acre. At present with the poor preparation and thin sowing, not over one or one and a quarter tons are obtained on an average. Every ton of straw yields three hundred pounds of flax fibre, so that he would then obtain, if he chose to rov and prepare it, as was done in the days of our grandfathers, about six hundred or six hundred and fifty pounds per acre of flax fibre rotted and scutched. For this fibre we would gladly contract for two years to come, at the rate of 12 $\frac{1}{2}$ to 15 cents a pound (\$250 to 300 per ton) according to quality. It costs us this price cash to import it, and we should much prefer paying it to our own industry.

The Peach.***Decay, Pruning, Training, Fruit Buds
and Wood Buds.***

During the past season we have seen multitudes of peach trees broken down and ruined by the weight of the fruit, and it has become a matter of serious enquiry with growers of this fruit so to control its yield as to preserve unimpaired the trees. With us the peach seldom fruits to any great extent oftener than every second year, frequently not as often as that; although fruit buds are abundant on the trees every season. When, however, the condition of things is favorable, the yield is so great as to break down the branches of the tree by the weight of the fruit, often splitting the trunk of the tree and laying it prostrate with the ground.

This, together with the early decay of the peach tree, has caused the peach crop, a bountifully productive crop, to be attended with many losses and expenses; and we have conversed with many experienced fruit growers on the subject with a view to gaining information, correct and reliable, to lay before the readers of the *Valley Farmer* by means of which they may not only preserve their trees from the casualties attending a superabundant yield of fruit, and the premature decay caused by their rapid growth.

We have seen a method adopted by Mr. Thomas, a very intelligent fruit grower and florist in the neighborhood of St. Louis, to attain both these objects, which to our mind appears more reasonable than any thing we have ever seen or read on the subject, and we shall endeavor in this article to explain that system and the reason for it, so as to be understood by our readers. In doing this we shall also avail ourselves of an article in the December number of that excellent publication, which every fruit grower and gardener ought to read, the *Horticulturist*. This article, a translation for the Journal of the London Horticultural Society from a French publication of M. Alexis Lepere, is upon the pruning and management of peach trees.

Mr. Thomas acts upon the following principles:

1st. The same peach wood only bears fruit once and that the second year of its growth.

2d. The premature decay of the peach tree is owing to its luxuriant growth.

3d. That the reason why the peach tree so often breaks down by the weight of its fruit, is because the growth of the limbs has been suffered to preponderate over that of the trunk,

4th. That the peach tree can be kept from growing more than ten or twelve feet high, by judicious pruning, with great benefit to its fruit growing qualities, and convenience to the cultivator, and

5th. That by such pruning its vitality will be retained for many years.

Accordingly, when the tree has attained the desired growth, say ten to twelve feet high, he cuts back all the growth at two years old. Thus the growth of last year (the only portion of the tree that will bear fruit this year) he leaves to fruit this season and then cuts it all away, while the growth of this year, starting from other branches than last year's growth, will be left to bear fruit next year, when it will share the same fate. By this means Mr. Thomas believes he can preserve the vitality of the tree, have fruit every year, and gather his fruit much more conveniently than from large trees.

Mr. T. has a beautiful place, which he is beautifying and adorning for a public garden and nursery. We saw there last fall beautiful peaches growing on trees that had been transplanted last spring. We consider his experience very important and shall watch them carefully and report from time to time his success. The article from the *Horticulturist*, which we copy almost entire, is worthy of the particular attention of all peach growers.

1. The peach tree, planted under favorable circumstances, shoots vigorously, and its vegetation is very active from the first fine days in spring till about the middle of October. Such are its vegetative powers, that, during this time, it is contin-

ally making fresh shoots which require a constant and judicious superintendence, if we wish to manage properly, and this greatly depends on stopping in time those growths which are not likely to suit our purpose.

2. As soon as the genial influence of spring is felt, the buds swell, and very soon the flowers come out; while the leaves, more backward, are yet within their envelopes. Afterwards, the leaf-buds open their scales, and the shoots burst forth, to become, the following year, branches of greater or less length.

3. From May to August the leaves, coming successively to maturity, acquire a more compact structure, and consequently absorb less sap. This continuing to flow, seeks fresh outlets, and produces, at the axil of the leaves, buds which remain as such, or break into laterals, according to the time of their formation, the continuance of fine weather, and the vigor of the trees.

4. These new productions, all formed in the course of the growing season, are easily seen at the fall of the leaf. They are the source from which our hopes of future crops arise; and as it is necessary to know them well, I therefore proceed to explain them in detail.

5. A. *Eyes or Buds.*—These are envelopes containing the rudiments of shoots, leaves, flowers and fruit. They are conical and covered with little imbricated scales, more or less coriaceous, and which are merely abortive leaves dried by the air so as to protect the tender parts which they enclose from the severities of the winter.—They continue in this state as long as the flow of the sap is arrested by the cold; and they commence growing when the weather becomes sufficiently warm to put the sap in motion.

6. If the eye does not receive proper nourishment it may remain a long time inactive; it is then called a *latent bud*. It is generally roused from its dormant state by pruning, performed with the view of calling it into action; or naturally, by an increased flow of sap which acts as a stimulus to it; otherwise it may become completely extinct.

7. Buds become either *wood-buds* or *fruit-buds*; and it is important for the operations of pruning to distinguish well these two conditions. I may, however, remark, that with reference to the Peach tree the nature of the bud is never doubtful to an experienced person. In fact, its form, its place, the age of the wood on which it appears, all help to show the function which it is destined to perform; but for those little acquainted with this tree it is necessary to enter more into detail.

8. *The Wood-bud* is an embroyo shoot, covered with imbricated scales of a reddish brown. Its form is usually that of a little cone, more or less pointed; when in the axil of a leaf it is always more or less compressed. The wood-bud comes on all parts of the Peach tree, upon the young as well as upon the older wood; and pruning can make it push from very old wood.

9. *Fruit-bud.*—This contains the rudiments of the flower. It is also covered with scales; but its form is always rounder than that of the wood-bud. Fruit-buds are only found on one year old wood.

10. There are upon the peach tree buds which are single, double, triple, or more numerous.

11. The single bud is in general a wood bud, from which a shoot proceeds. We never see flower-buds by themselves.

Most commonly the fruit branch that bears them is terminated by a wood-bud or growing point, the use of which is to draw into this branch the sap necessary for the nourishment of the flowers and fruits; but it may happen that by accident or abortion this eye does not exist; yet the loss of the fruit may not result. In 1844 I observed numerous instances of this, and further on I shall have to refer to them.

12. Double buds generally consist of a wood-bud and flower-bud.

13. In the triple buds, two are flower-buds, the other a wood-bud. There are also tripple buds which consist of three wood-buds. But this sort does not show itself except on the shoots of young peach trees, or on those that are very vigorous. It is always the middle eye that is the strong-

est; sometimes those at each side die off. I shall state, further on, the procedure adopted in pruning them.

14. Quadruple buds, although they appear as such, have always in the midst of them a pushing-eye that is at first hardly visible, which leads one to believe that it is absent. The four prominent ones are all flower-buds; but the wood-bud that develops a little later has the same functions as the *ail de pouise*; or growing-point (11;) and from its presence these ought to be called quintuple. They are rare, and always at the end of a little branch or spur. They are sometimes more numerous, and disposed in the same manner with a growing-point in the centre. The growing-point sometimes perishes without consequences to the fruit.

15. When no accident occurs to the fruit-bud, there results the opening of the flower, which, after having fulfilled its functions, sets a fruit, of which the growth and maturity successively take place.

16. The wood-bud produces all the woody parts of the tree; these, at first herbaceous, undergo several modifications, of which we must give some account.

17. b. *Of the Young Shoot.*—The young shoot is the first state into which the wood-bud enters in continuing its growth. At first it is merely a cluster of two or three young leaves, which expand with the small herbaceous stalk that bears them; and a greater or less number of leaves form upon its length in proportion to its growth, which is sometimes very extensive. When the young shoot is vigorous, eyes situated near its point, break out during its growth, and give rise to productions which receive the name of *summer laterals*; and which, at Montreuil, we designate *redrageons*.

18. The young shoot is so called until its elongation for the season is terminated; after that it is termed a *rameau* [by the French; in England the qualification of *young* is no longer applied, and it is merely called a *shoot*.]

19. c. *Of the Shoot (Rameau).*—It has been shown that this is nothing more than a young shoot in a more advanced

state. Nevertheless, it is still distinguished from the young shoot, not by its strength only, but by the eyes with which it is furnished throughout its length. These eyes are at different distances, according to the vigor of the shoots. The latter vary in length from four inches to six and a half feet.

20. The shoot (*rameau*) preserves its name so long as the buds with which it is furnished remain unexpanded; but as soon as they commence to burst forth, in the following spring, it becomes a branch.

21. The false shoot, or lateral, bears the same relation to the shoot, or young branch, as the summer lateral does to the young shoot. In some respects the false shoot ought to be considered and treated the same as the shoot.

22. I admit but two sorts of shoots (*rameau*), namely: 1st. the wood shoot; 2d, the mixed shoot—that is to say, one for both wood and fruit.

23. *First sort.*—The wood shoot is adapted for the production of wood and leaves only. Its vigor is equally distributed, and the eyes with which it is furnished are of nearly the same size. It abounds in young trees, and occasionally the terminal shoots of older trees are of this description.

The over-luxuriant (*gourmand*), which is a strong shoot of the sort just mentioned, differs from it in its broad base, in its disproportionate growth, in its length, in its thickness, in its grayish bark speckled with brown, and in the distance of its eyes from each other, the lower ones of which are nearly obliterated, while those at the top are large, drawing all the sap to themselves, and inclined to push out laterals. The over-luxuriant shoot shows a bad circulation of the sap, and is seldom found on any but very young peach trees, or on those that are badly managed. It is most frequently taken off; but this should be done before it has attained too great a size; still there are circumstances which I will point out, where it can be made useful by pruning.

24. *Second sort.*—The mixed shoot, as previously observed, is that on which both wood and flower-buds exist.

25. d. *Of the Branch.*—It is now understood that every shoot is, in general, the origin of a branch, on which, by the influence of pruning and the continuance of growth, the buds with which it is furnished break forth. Some of these buds give rise to young shoots only; others to both young shoots and flowers.

26. Hence it follows that, as I only allow of two sorts of shoots (22.) I recognize but two sorts of branches, namely: 1st, the wood-branch; 2d, the fruit-branch. I make use of the latter expression because it is usually adopted, although improperly so, as branches bearing fruit only rarely exist on the peach tree.

27. *First sort.*—The wood-branch is the second state of the shoot, of which all the buds are wood-buds. The first branches that a young peach tree makes are of this sort, because, being nourished by a strong flowing and as yet imperfectly elaborated sap, they can not, during the first year of their existence, give rise to anything but wood-buds which become successively young shoots, mature shoots and branches. They afterward remain wood-branches during the life of the tree; and they preserve the power of producing wood-buds at any age, whatever may have been said to the contrary.

I dwell so much upon this fact, because it is hardly admitted; and many persons yet maintain that the peach tree never forms shoots from the old wood.

Whatever be the mode of training the wood-branches form the frame work of the tree. They receive different names, according to their place; but I will speak of this in treating on pruning, having only to consider here the peach tree, and the nature of its productions.

28. *Second sort.*—The fruit-branch follows the mixed shoot (24), as has been seen, and is always borne by the wood-branches. We also call it at Montreuil the *small branch* (*la petite branche*), from the difference between its size and that of the wood-branch. In fact, its thickness rarely exceeds that of a large quill. After having borne fruit it becomes a wood-branch, if

not removed by pruning, in order to replace it by another of an age to bear.

29. The fruit-branches, beside their use of producing fine and good fruit, have another that is not without its interest, that of shading from the excessive heat of the sun both the fruit which they nourish and the bark of the wood-branches which bear them and to which the nearer they are the better they protect.

30. Such is the account that I have deemed necessary to make of the manner in which the vegetation of the Peach tree is carried on. I have thought this necessary in order to render more intelligible the explanations which I have to give on its pruning.

In recapitulating what has been said, we recognize that all growths in this kind of tree commence by an eye or bud; that this eye is either a wood-bud or a fruit-bud;—that a wood-bud may be produced on all parts of the tree, even upon those that are oldest; that it successively becomes a young shoot, a shoot, and a wood or fruit-branch; that the flower-bud is not produced on any other than wood of one year old, and that to have fruit for any length of time, we must know how to produce a succession of this young wood.

Lastly, it is doubtless understood that each wing of a Peach tree trained against a wall is the product of an eye of the original tree that has undergone all the changes spoken of.

To PROPAGATE RED CEDAR AND SPRUCE.—The berries of the red cedar, when gathered, must be buried in light earth. If sown the same season they are gathered, they lie in the ground a whole year before vegetating. The spruce seed grows the first season. Dry the cones until the seed comes out; sow early in the spring in a dry border of light soil, or in boxes; shade in the middle of the day, when the plants are coming through the ground, and until they begin to make a second growth, when they will be hard enough neither to burn nor damp off easily.—*Horticulturist.*

Bountiful crops are more profitable than poor ones. Make the soil rich, pulverize it well, and keep it clean, and it will generally be productive.

For the Valley Farmer.

Well digging.

SIR,—In the last number of the Valley Farmer, I noticed an effort of Mr. J. Roberts, in answer to my article in the August Number. Mr. Roberts, probably had not noticed the long article on the same subject, in the May No. But being waked up in his majestic strength of intellect, he pounces upon ignorance, error and superstition without allowance or mercy. And I am the unhappy victim of his burlesque and reproach. But with due deference to himself and his opinions, I would suggest to him and to your readers, that he has not adduced such conclusive arguments on the subject, as he has vainly deceived himself with. In the first place I would beg attention to the statements of process in the two articles. Does Mr. Roberts present the same position of the hands on the rod? No, my position is the very one he would chose as one to confute the doctrine. And if Mr. Roberts chooses, I will hold both prongs in one hand, or one single rod if he pleases, I will hold it with the palms of the hands inwards, thumb nails up, so that the rod shall stand verticle between the thumbs and fore-fingers, and so that the rod shall bend itself over the fore-finger. And Mr. Roberts may hold my hands fast clenched in his, if he chose, so that my animal conditions shall be perfectly steady and secure. This is my plan, and the method, *holding it firm, a prong in each hand, thumbs up*, is the one I suggested. But he has brought up quite a different position, and attempts to show the fraud practised by the water witches upon the credulous. Now Mr. Roberts, fair dealing is the way to go it. I confront a man on his own creed, and not on that of another. Men may believe one thing and practice differently, and if the different practices produce the same results, we have no reason to condemn either mode of practice, but at the same time the mode least exceptionable is always to be preferred.

Mr. R. was once a child! He then acted as child; 'thought as a child.' 'But

when he became a man, *he put away childish things.*' He has long given it up as a chimera and thrown it aside in the plunder house of Error and Superstition. In childhood he did not know but that there might be some truth in thus discovering water under the surface of the earth! Does Mr. R. deny that there is truth in it? That there never has been water found under ground by the agency of the rod? If he does, he cannot deny one fact, that water-witches are generally the best kind of guessers.

Objection first. 'The workings of this mysterious rod are owing to the manner or condition in which it is held. Much deception might be, and truly is practiced in the world at this time. Humbugging is the order of the day, in almost ever department of business; but we are not obliged to turn infidel, because we see deceptions practiced in anything. Error never can stand the test of Experimental Philosophy, and we may undeceive ourselves by actual investigation. I think my proposition is clearly understood, and that Mr. R. will have to take the *Lawyer's* benefit. Secondly. The size and condition of the rod, I propose a rod that forks, and that carries size with length in each prong: from fifteen to forty inches in length, and from the thickness of my goose quill I write with, to that of a large riding switch. I do not choose it to be of the stiff or rigid nature of a biggot, but moderately elastic, so that it may yield to moderate and real impulses, nevertheless, they may be of the mysterious kind. The condition of being green and fresh from the Hazle patch is a very essential condition. It is then as vigorous in every sense of the word as my opponent and myself could desire.'

Thirdly. The points at which the rod or Forked Stick, are held. I would fix that point at the nearest position to the points of the forks, that would poise it perpendicular at rest, when unattracted, and at that point that would hold it in a verticle position independent of the force of common gravitation. Now I ask, is this the kind of rod, and modus opperandi that you

would choose to represent as a poser to the doctrine of Hydrology? It is not the one you have presented, which as a 'cutter' at my article does not fit at all. I wish you to compare your article and mine together again, and see if you have not grossly misunderstood and misapplied. In your '*explicit*' 'First then, the palms of the hands are reversed, with the thumbs extending outwards.' Is this a fair copy of the text? No: 'A prong in each hand, thumbs up' and to be more plain, palms towards each other, and arms extended forward and a little apart. Now sir by squeezing the rod ever so hard in this position, what effect would it have as a counter balance to bend the rod forward over the forefinger, and down so as to break off at both prongs, not with the mere weight of the point of the rod, nor the natural degrees of attraction of gravitation, but from the alone effects of this mysterious cause. Just on the very proposed position of my honorable opponent, '*thumbs up*' and no mistake. Secondly. 'The smallness of the rod preventing the operator from obtaining a firm and efficient gripe so as to prevent its changing its position in the hands by a superior weight above.' This is nothing descriptive of my process at all. It has no occasion to screw and twist the bark off, but gradually bend forward by its own impulse, and when at its extent of humility, if the operator chose, and the rod is not broken with the force of the draw, he may move forward some little distance, so that the attraction will be back, and the rod becoming relaxed from its attraction, will rise and strive to regain its relative position towards the hidden stream. I have never experienced the rod making its obeisance to the earth, where there was no water. The depth of the water under ground, found by the pulse of the rod. The rod vibrating or resting at intervals, and seming to obey the mental enquiries of the operator, seems a little on the superstitious order, the how, why, and therefore, we may deny or accede to, as we please, or as we have knowledge and experience in the matter. But the ground that Mr. R. takes

relative to two feet to a stroke or vibration is not mine. I think it as probable that the rod understands French as English, and a French operator might make it 26, 36 or 40, and an Englishman might make it 24, 32 or 38 feet, and after the well was dug and water found it might agree with both, or not exactly with either, but so the water is actually found within a few feet over or under, does that go to condemn the art to obloquy?

I think many of our great sciences, Electricity and Chemistry, in particular, had they been judged and condemned do oblivion for the failures and errors in the beginning, and the objectors and opposers of high standing that stood up in opposition, ten chances to one, if we had ever known anything of the Telegraph, of Railroads or Steamboats. But my opponent thinks the French will perhaps not have the benefit of Hydrology. Or at least the 'new theory.' Why? Because they are rather infidelic. Query. Is Mr. R. a Frenchman? If he is he has certainly not been a reader of the Valley Farmer earlier than the August Number, for the May Number would have taught him that Bleton was a Frenchman, and professed to have a high share of this faculty. If a Frenchman was to measure the road to mill and make it twenty French miles, and an Englishman opposite on the other side of the way was to measure the same road to mill eighteen miles, would the Englishman be two miles nearer the mill than the Frenchman? If so, the Frenchman should throw away his measuring stick, and go by good old English measure. This I consider as good a French argument in favor of Hydrology or Bletonism if you please, as Mr. R.'s French difficulty will be against it, and I shall now notice his last position. 'Timber growing near streams and rivulets leaning towards them, and his method for "accounting for it." The friction of flowing streams, constantly removing the earth from the roots,' &c. All agreed to, that water washes banks away from trees and they fall. I believe that is a self-evident fact in the World's History, and water conjurers are

as apt to find that out as any of the other classes of 'Smarties.' But this is by no means our position. We contend that there is a certain principle of gravity in living streams and fountains under the surface of the ground, that attracts the tender boughs of growing timber towards it, independent of the wearing away of banks, blowing of winds &c., and that this is discoverable in timbered countries, and the place of a stream and its course pointed out to a certainty. My argument in support of this doctrine is experimental fact, for I know no philosophical principles on which to base it, and have been hoping and waiting for some writer more able than myself to venture out on the subject.

If Mr. R's. curiosity or interest either, would lead him towards the South Western part of Missouri, I should take great pleasure in showing him simply what I conceive to be the true laws of Nature, and as observable as the principles of Galvinism, Magnetism, or any other ism in Nature; to wit, the bending of boughs towards hidden streams some forty feet under ground, tand round holes dug down, and living streams of water actually found. And then I would say like one of old *'Be not faithless but believing.'*

If Mr. Roberts solicits a controversy on this subject, I would just remind him of two boys I once saw boxing in swimming water. They had nothing but water to stand on, and had a merry time of it; clinching was dangerous, lest both should sink to the bottom together. Investigation is the brightener of truth, and our theories would be but loosely compounded of truth and error, were it not for opposing minds, throwing brush in the way, and causing argument and research. Then welcome contradiction, if it leads us to reflection and truth. If I am robbed of half my theory, should that half be nothing but its errors, I have gained by the loss. Pure truth by the ounce is worth pounds of alloy.

My dear Editor, may the Valley Farmer and its conductor, grow and prosper, and live for ever in the memory and hearts of the people of Missouri. With the deep-

est feelings of gratitude and respect I am your humble servant and friend until death.

JOHN W. WILKINSON.
Mount Vernon, Mo., Nov. 22, 1853.

The Culture of the Grape—No. 1.

[For the manuscript of the series of papers which will be published in this and succeeding numbers of the VALLEY FARMER under this title we are indebted to Mr. R. NICHOLLS, of Calaway county, Mo., who has kindly provided them for our use. The essay was written by an experienced vine grower of Philadelphia with a view to its publication in book form, but by some means it came into the possession of Mr. Nicholls who is desirous that it should be given to the public. At first we thought of rewriting it and adapting it more particularly to our own latitude, but we have concluded upon the whole to give it in its original language, with such corrections of style or expression as may be necessary. Some ideas advanced in it may not possibly be correct, and we request such of our readers as have knowledge upon the subject, to communicate to us any such teachings and also their ideas upon the matter.]

Isabella, Catawba, Elsinborough, and Alexander or Schuylkill Muscadel are the most productive of the native grapes cultivated around Philadelphia. Isabella does best, Catawba is subject to rot. Alexander or Schuylkill Muscadel ripens earlier and will bear harder treatment than the other kinds. Isabella is sweeter and has less of the foxy taste than the Catawba but most people like the spicy taste of the latter variety. Elsinborough resembles the chicken grape, small berries and thin bunches; not much cultivated in this place. Alexander may be found in the oldest gardens, it frequently ripens earlier than the other kinds and is usually suffered to remain on the vine till the early frost shrivels them a little; this concentrates the saccharine matter and evaporates the watery particles from the berries. It possesses one advantage over the other kinds it will remain on the vines till after the Peaches are out of the market. So long as Peaches are hawked about the streets at 10 or 12 cents the half peck, other kinds of fruit will be proportionably cheap. Although grape vines in the city ripen their fruit about peach time, native

grapes in the country follow close behind the peach crop and will fill up the vacuum in the market caused by the withdrawal of the peaches.

Grape Vines have local habits and change of soil, and situation, sometimes produces strange results, for instance Isabella does better than Catawba about Philadelphia, Catawba does better about Cincinnati. The French have some two or three hundred varieties of Chasselas named principally from their favorite localities. There is every reason to suppose that originally they had but few varieties. Every change of soil or situation, has made some difference in the habits of the plant and quality of the fruit, until it becomes in course of time to be regarded as a distinct variety. We frequently see this change in the Black Hamburgh, if the soil be too high manured, or the plant be overburdened with fruit, the grapes do not attain their proper color, and they are called Red Hamburgh, and palmed off for a new variety, whereas mismanagement has so enfeebled them that they do not produce their fruit in full perfection. Doubtless there are many who have tried to raise Black Hamburghs in the open air in Philadelphia who by strict attention to cutting away the branches and thinning out the berries have had them ripen of a fine black color, and the next year from having too much fruit on the same plant, it produced berries of a reddish color. This may be observed in the Isabella; the more moderate crop the darker the berries and finer the fruit. When the last mentioned variety has too much fruit they do not acquire their usual dark purple color, but like the Black Hamburgh, produce an inferior fruit of a reddish color. Under these circumstances we might as well call them Red Isabella, as nickname the other Red Hamburgh. Undoubtedly there are some Black Hamburghs which by continued bad usage have failed to produce their fruit in full perfection and continue to produce nothing but what are called Red Hamburghs, but on comparing and tasting the fruit the inferiority is very evident, the plant has degenerated by a long course of bad treatment. Grapes may be raised in all the States of the Union, but the less favorable the situation or soil the smaller

quantity of grapes must be suffered to remain on the plant to ripen—the further south and the better the exposure the more fruit will the plant be able to mature, provided it be growing in a suitable soil.

Vines will do well in our cities in any yard having a southern, eastern, or western exposure, and no man may suppose himself too poor to raise his own grapes, as they will grow in almost any soil that is not too retentive of moisture, without the aid of any rank stimulants, provided care be taken taken that they have not too much fruit on at any one time.

Do not fasten close to a brick wall or a board fence. This is necessary in England. But we have here a more genial climate, and they ought to be tied to some strips or rails six or eight inches away from the walk or fence, grape vines will not thrive hereabouts unless they have a free circulation of air about them, if you smother them up or confine them in a close manner your bunches will be full of spiders' webs and your leaves will be swarming with thrips and a small insect resembling a small greenish yellow fly which fastens itself on the under side of the leaf, and partially destroys it, leaving the foliage full of white spots in the month of August and September. Vines in a confined situation are full of them, and on shaking the vines they fall off about your face like a swarm of gnats or mosquitoes. Red spider is another insect destructive to vines and plants generally in this climate, it is a species of spider which encloses itself in a very fine web on the underside of the leaf, moisture is more offensive to them than anything else, flour of sulphur is sometimes used with water and thrown on the plants with a syrange. When magnified a thousand times these little insects appear about the size of a common bed bug and are the cause of the leaves turning to a reddish yellow color, and shrivelling up in the latter part of the summer about the time the fruit ripens. When vines are in a thrifty growing state as they usually are in the Spring and early part of summer, there is a natural moisture about the leaves which is offensive to the red spider. So long as the plant is kept in a thrifty growing state they are not so subject to the attacks of insects of any

kind. If you have too many shoots they will of course be weak in their growth, causing a feebleness in the plant which predisposes it to diseases of all kinds. By pruning the vine properly in the vine season and afterwards thinning out the shoots and fruit you superinduce a vigorous habit and thrifty growth which is the only preventive of the diseases they are subject to. When once attacked it is a difficult matter in the open air to effect anything like a cure. If the plant is not enabled to out-grow its diseases all efforts to remove them will be unavailing for that season at least.

ON SOILS AND MANURES.

Any soil that is not too retentive of moisture is suited for the native grape. If there is any clay about it, or anywhere underneath it, vines will not do well. They may be grown fast and thrive well for three or four years, but will afterwards continue to run to wood, and produce but little ripe fruit. When the roots reach the clay the fruit will be covered with mildew long before it has a chance to get ripe, and in many cases will rot before the berries have attained half their size.

Land which has rocks or stones underneath, with loose, pliable, calcareous earth or sandy loam on the surface—soil which is usually considered too sandy, gravelly or stony for the cultivation of the usual routine of farm crops—will answer very well for vines. All plants discharge excrementitious matter from their roots. They absorb substances from the soil which afford them no nourishment, and these substances are again returned to the soil. If this soil or its subsoil be of an open, porous nature, the excrements and excretions will readily pass off or by coming in contact with the alkaline properties of the soil will be purified and decomposed; but if the subsoil is of a close, clayey consistency, the excrements of the plant cannot pass off, or decay, producing diseased roots and predisposing it to mildew. Turning the soil and exposing it to the rain, air, and frost, decomposes the matter, and prepares the soil for the next crop, but this cannot easily be done about the roots of vines after they are well rooted, only to a limited extent; therefore the soil should be naturally of such a light porous nature, that this operation will in some

measure be unnecessary. Trenching the ground, that is, turning over the ground to the depth of two feet is beneficial to all trees and plants—enabling them to get rid of their excrements with more facility. Strong manures may stimulate a premature growth and encourage the formation of unusual quantities of fruit and leaves, but should the plant at any time be suffered to produce more fruit than it can mature easily its vitality will be impaired, and it will retrograde in the same ratio that it had previously advanced by the force of the stimulants. A plant growing in natural soil having been injured by overcropping could be made to rally by the aid of stimulating manures, but it will be a difficult matter to stimulate a plant that has already been stimulated to its utmost, because you cannot give it anything stronger than what has already been applied. The most decisive proof of the use of strong manures was obtained at Bingen, a town on the Rhine, where the produce and development of vines were highly increased by manuring them with such substances as shavings of horn, &c., but after some years the formation of wood and leaves checked the growth of fruit to the great loss of the owner, to such a degree that he has long had cause to regret his departure from the usual method.

By the use of these strong manures the vines had been too much hastened in their growth; in three years they had exhausted all the potash in the formation of their fruit, leaves, and wood, so that none remained for future crops, his manure not having contained any potash. There are vineyards on the Rhine the plants in which are one hundred years old, and all of these have been cultivated by manuring them with cow dung which contains a large portion of potash. All the potash which is contained in the food consumed by the cow is again immediately discharged in her excrements. The leaves and small branches of trees contain the most potash, in fact they contain more of it than the wood which is contained on the tree itself. It has been a custom in Germany, now discontinued, to allow the poor people to collect the leaves and small twigs to litter their cattle with. The trees were found to suffer

so much by this means that their removal is strictly prohibited.'—*Liebig.*

Cow dung rotted down with the leaves and small twigs is therefore the most suitable manure. I have invariably found it to be the best for vines. It should be spread over the surface of the ground, not more than an inch thick, once a year and lightly worked in to the depth of three inches, but by no means place it in a contact with the roots: let the substance of the manure find its way to the roots through the agency of the rain, and then it will reach them in the natural way, properly rectified by contact with the air, heat and moisture near the surface of the ground. If it be necessary to make a border and remove the soil, old sod three inches thick taken from high dry ground which has been down in grass for some time (the older the better) will be found to answer the best. Vines and corn thrive best on the soils which contain a great portion of potash, alkili is indispensable to their growth. Old grass sod contains more alkalies than any other kind of soil. No matter how you prepare a compost nothing can be made to answer so well, as it contains all the alkalies in their proper mixture suitable to the formation and growth of plants generally, grape vines especially. Farmers all know that an old sod turned down is the most productive for any crop. Some writers say that bones, horns, and hoofs of cattle, bone dust, carcasses of animals, cuttings of leather, woolen rags, feathers and hair are cures for the ills grape vines are subject to, now I think if a cultivator's system is so miserably bad that he has occasion to use so many strong stimulants as here enumerated to sustain it neither the vines nor his plan of managing them will last long. It may safely be asserted that if a grape grower cannot manage his vines without strong manures, stimulating will be only a temporary advantage to him. Whatever these stimulants may be in the old country, I am convinced they are about the worst thing on this side of the Atlantic. I recollect a case where a gentleman residing in Philadelphia had some fine foreign vines doing very well in the open air, in a border made up with sod and top soil, and top dressed with cow manure and allowed himself to be persuaded that all was wrong, and that they would grow faster, and bear bushels of fine fruit provided he would have them top dressed with ground bones, horse manure, pulverised stones, and I hardly know what else. Everything went on very well till they had grown out about three feet in length when suddenly one of them blasted and the others were all drooping. Concluding that as the vines had always done well previous to their being doctored with the bone panacea, it would be better to have the stuff removed, it was done, and it was found that the pulverised stones had consolidated the mass so finely that no rain or water had reached the roots that spring. The stuff was all taken off as closely to the roots as could be done without injury; they were watered freely, the ground had become so dry that the water was absorbed as with a sponge. A mixture of charcoal dust, oak leaves, and river sand was spread over about three inches thick, so as to well cover the roots. They were occasionally watered, and in a week's time they were growing as fast as ever. On examining the compost which had been taken off there was a strong smell of hog manure and traces of shavings, but the whole was one mass of vermin, lice, worms, maggots and centipedes. The ground bones and hog manure seem to have generated them. This I have found to be universally the case with ground bones; they have always generated all and every kind of worms, &c., which destroy the roots of vines. I once purchased a bag of ground bones to give them a trial on some vines I was about planting. Not being in a hurry to use them I let them remain in the bag two weeks exposed to the weather, and in that short time the whole concern had become one mass of corruption, swarming with worms and maggots. I quickly sold them to a person who had more faith in them than myself. When vines are growing in a good natural soil, not previously exhausted of its alkalies by other plants, they naturally absorb what suits them best; when they are growing in a mixed compost of rank ingredients they have to take it as it is, whether it suits them or not, and the quantity of offensive matter absorbed by the plant and afterwards rejected by it

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becomes so great that the whole plant becomes diseased from the excess of its own filth about its roots; the leaves have a yellowish sickly look, and it is finally smothered with mildew, or red spider or both.

Although it has been stated that the alkaline ingredients are the strength of the soil and that the potash is the principal one required for Grape vines, it must not be supposed that the poish of commerce is the thing meant. Liebig says: 'It must be here remembered in plants yielding Oxalic acid, the acid and potash never exist in the form of a neutral or quadrable salt, but always in a double acid salt, on whatever soil they may grow, the potash in grapes also is more frequently found as an acid salt, viz: cream of tartar (bitartrate of Potash) taken in the form of a neutral compound. As these acids and bases are never absent from plants, and as even the form in which they present themselves is not subject to change, it may be affirmed that they exercise an important influence on the development of fruits and seeds, and also on many other functions of nature of which we are at present ignorant.'

For a vineyard in the country, much depends on the soil being of a light loam, or land which is commonly called shelly; that is, soil which contain small particles of stones in a pulverised or decaying state, having a subsoil full of small stones where quarries of freestone or limestone are some ten or twelve feet below the surface. This kind of land is generally good land for grain crops when manured fully. Eastern or south-eastern exposures are very generally preferred; the most furious winds in the summer season on the continent blow from the south-west. They may do well in a western exposure but it will be necessary to have them well secured and tied to a substantial support in order to resist the sudden gusts which come in the summer and autumn when they have a dense surface of foliage and fruit for the wind to operate on.

ON PREPARING VINEYARDS IN THE COUNTRY.

Having selected a good soil and favorable aspect, the preparation of the soil is the next object to be accomplished—as

many will be guided by their means and quality of their land—I shall state different ways of working the ground.

1st. If the soil be of a sandy loamy nature, of good depth and open subsoil, there may be nothing more necessary than to plow as deep as you can, working it in strips eight feet wide, plowing towards the middle of the eight feet ridge, the vines to be planted on the middle or highest part of the ridge, eight feet apart from the rows, has been found to be necessary, but five or six feet may do where the soil is of a light sandy nature, with gravelly subsoil. Usually however, in good soil, where planted less than eight feet apart there is not sufficient circulation for the air, between the rows. In wet weather the air stagnates and the bunches are apt to rot or mildew and in the autumn during very dry weather, thrips and red spider will be troublesome. You will find thrips and red spider more prevalent when the foliage is dense and the situation close or confined; besides you cannot work between the rows with a horse harrow or cultivator where they are less than eight feet without some danger of injuring their roots or branches. Where the plants are well established, the roots immediately about the stock of the plant will be very near the surface and if the ground be worked at all by horse labor it can only be done in the middle of the rows. For the distance of two feet from the rows the weeds ought to be cut down with the hoe.

2nd. Commence at one end of your ground, and dig out a trench eighteen inches deep and two feet wide; throw all the soil to the outside of the trench; let this lie where it is till the last trench be done, then take it there on a cart. Set your line back two feet further, and commence by digging off the surface and throwing into the bottom of the newly made trench, and then place what remains to be dug out on the top of that, so as to place the uppermost soil underneath and the undermost soil on the top, or to make the matter more clearly understood: take four men, give two of them spades and two of them shovels, let one man commence at one end with his back towards the other end take off a spade depth of soil turning it into the new made

trench, let one man follow with a shovel with his face towards the spade man to shovel out what may be left by the spade. When they have advanced some ten or twelve feet put in another man with a spade to take out another spade's depth of soil, and another man to follow with a shovel to clear out the loose dirt; when the man who went first gets to the end of the lot let him take the third spade deep out to be followed by his shovel man to finish, the one which now took the second spade now begins a new trench. The surface soil being softer each one takes his chance alternately, and does his share of the hard digging. Every time they begin a new trench let the spade man change with the shovel man. The spading is much harder than the shoveling; thus by alternately changing their position and their tools, each one is compelled to do his fair share of the work. If the ground be very hard or stony, you will have to put the spade one side and use the pick axe, alternately picking and shoveling until you have reached the proper depth. This is considered the most approved method of preparing the ground, and is commonly called trenching. Eighteen inches is deep enough to break up the ground in this country. I have transplanted some hundreds of vines, but never found the roots of any of them more than fifteen or eighteen inches below the surface, and I recollect one instance of a border made four feet deep and four feet wide and filled up with top soil and stable manure; two years afterwards I had to remove the vines and found the finest roots from a foot to fifteen inches under the surface and very few so low as eighteen inches. I represented to the owner when making the border in the first place that it would be better to make the border eighteen inches deep and ten or twelve feet wide, as grape vines like to ramble and prefer surface to depth. He however, thought the information there contained better than anything that could be had on the spot, but although the border had been prepared four feet deep with horse manure, the roots had in a measure forsaken it and remained under a grass plot which was filled up a foot deep with sod and top soil. It is said that there is a country seat near Phila-

delphia where the vine border was made eight feet deep and filled in with a mixture of bullock heads, shins of beef, dead carcasses, &c., as all this rank stuff was placed more than eighteen inches below the surface. I very much doubt whether any of the roots will ever reach it, and if they do there will be an abundance of roots and foliage and very little ripe fruit or sound wood. Nothing is so sure to produce mildew as having your roots in a too great depth of rank soil, unless the bottom be very dry, making borders more than two feet deep is throwing money away and instead of placing inducements for the vine to go down below their natural depth, the contrary is the better policy. Keep them as near the surface as you can. Nearly all the foreign vines which have been planted in deep borders of rank stuff about Philadelphia have turned out to be a miserable failure, while many persons who have bought a foreign vine for twenty-five or thirty cents and planted it in a space made by taking up some half a dozen bricks in the pavement next to the house, and throwing in about half a barrow load of natural soil, leaving the plant to do the best it could for itself among the rubbish, sand, and gravel underneath the pavement, have succeeded in raising good crops of well flavored foreign grapes, without any protection in winter. On removing the brick pavement the roots will be found closely matted in the sand and gravel, close up against the bricks.

I once saw a Grapery which had been put up expressly to raise the white Muscat of Alexandria, one of the most difficult to produce in full perfection. In order to give it what was then thought a good chance the border was made eight feet deep. They grew rapidly for four or five years, still they did not show much fruit: what little there was did not set well or ripen regularly. The gardener in charge of the place having been recently placed there, saw at once the blunder of his predecessor, and placed some flag stones on the surface of the border. On removing those stones soon after the surface of the soil was covered with newly formed healthy roots, they were covered with a thin layer of rotten leaves, and the stones

replaced, the roots again filled this layer of leaf mould. This was repeated some four or five times till a good supply of young roots were formed near the surface, the next year there was an abundance of fine fruit.

For vineyards in the country, you might either trench the whole of the ground as above recommended or a portion of it, say for instance, a strip four feet wide, leaving four feet between the rows not trenched. You might trench it two spades deep instead of three, and I have no doubt that where the soil is anyway favorable, the ground may be made to answer with a thorough deep plowing, crosswise and lengthwise. But still the trenched ground will make the best vineyard, as it will make the plant more healthy, by placing it in such a depth and looseness of soil as will enable it to cast off its excrementitious matter with more facility, be drier in winter and keep up an equilibrium of moisture throughout the summer. For city planting, they will do very well where the ground has been filled up with loam and rubbish, as most of them are if they have not more than a foot of good natural soil on the surface. If it be a hard clayey subsoil it might be dug out eighteen inches or two feet, and the bottom sloped off sufficiently to turn the water to one end, where a hole might be dug and filled with brick bats to receive all the excess of moisture which drains through the soil. It is customary to dig out some four or five feet and fill up in part with brick bats, shells &c. In this case the water soaks through and settles underneath the border, if it be dug out with a sloping bottom, with a sink at the lowest end, and a thin layer of oyster shells be put in the bottom of the border; say three inches thick, there is little danger of any water stagnating about the roots; but there is no necessity for this draining in ninety-nine cases out of a hundred, as there are but few places in a city where clay is to be found within ten or twelve feet of the surface the brick-yards work it all up very close before the houses are built. Top soil from an old pasture or commons is all you want to fill up with. Old garden soil is not good being previously exhausted of potash by repeated cropping.

Culture and Value of the Parsnip.

As one who has lived twenty years upon a farm searching all the while for *reliable* information, both from his own experience and from that of others, ought to be in possession of some 'fixed facts,' and settled opinions; and as duty, propriety, and fraternity require that we should allow others an opportunity of benefiting by our experience, I feel moved to give you a few items of information which I think is very satisfactorily settled by evidence within my own observation.

Disliking long prefaces, and trusting that all your correspondents will dispense with them, I commence the brief summary of my experience and observations for twenty years, by a statement in regard to the value of parsnips.

PARSNIPS FOR HOGS.—One of the things which I consider well settled, and a reliable and useful item of knowledge is this: that parsnips either raw or cooked, but preferable cooked, with the addition of apples, potatoes, &c., occasionally, were it only to prevent the appetite from being cloyed by 'eternal sameness,' constitute the best kind of food whereon to fatten a hog. They are also the best kind of roots for milch cows. Both hogs and cows eat them with avidity, and to the milk and butter they communicate a good and delicious flavor. I have seen it stated some years ago, that beef made from parsnips brings the highest price in the London market. I think, though I may be deceived by imagination, that pork made from feed chiefly composed of parsnips, is sweeter than when made from anything else.

This is not the only recommendation which may be justly bestowed on the parsnip. Among its other good qualities is this—that it requires no housing in the fall, as other roots do. In all the middle, northern and western States, potatoes, carrots and turnips, must be harvested and housed, or buried; and even when all this is done, and with good care and judgment too, a portion will frequently be ruined and lost by frost, over heating, or decay from other causes. Parsnips, on the other hand, require no care in the fall, as they may be left in the ground, without injury, all winter. They may also be planted early in the spring, as the frost does not injure them, even at the earliest stage of their growth, so that this root crop interferes the least of any with employments which crowd upon the farmer in the spring and fall. It continues to grow through the whole season, until the ground freezes in winter; it requires no expenditure to gather or store it; it may be taken up on several occasions during the winter, and the roots that stay in the ground *all* winter are not injured by the frost. Parsnips seem to be eaten with more relish than either turnips or

potatoes, and yield in the raw at least a state greater amount of nutriment.

Another advantage of cultivating parsnips is, that on a suitable soil—sand or loam, rich, or well manured, and deep plowed—a large growth may be secured. At the rate of 1200 bushels have been gathered from one acre of ground.

Parsnips may be planted either in the spring, or in the latter part of summer, say in August or September. The ground should be well manured, mellow, and deeply plowed, and the seed sown in drills, so as to have plants to thin out, while preserving them at about eight inches apart. This will probably require at the rate of two pounds to the acre. The drills should be two feet apart, and the space between well cultivated and kept clear of weeds. If sown in the spring the earlier the better. A large growth may be secured, however, by sowing the seed in September. There will be some considerable growth before the ground freezes up, and the growth will commence again as soon as the frost leaves the ground in the spring which will continue throughout the whole season, of about twelve months; whereas, when sown in the spring they can grow only eight or nine months.

All the advantage of this root crop have not yet been named. Among them are these—that they seem uninjured by either wet or dry season, and that no insect or bug attacks them at any stage of their growth.—*Working Farmer.*

Our readers are aware that we have frequently called their attention to the parsnip, though we are not sure that it can be cultivated as easily as the carrot. The English farmers are very much in favor of the carrot, and say but little of the parsnip as a field crop.

Yet we cannot think the carrot more nutritive than the parsnip, nor so productive of milk. The parsnip is much sweeter to the taste than the carrot, and there is no question about its fattening qualities. Why then should we not make more trials of the parsnip for a field crop?

We recommend to our agricultural societies the parsnip, in the hope that they may be induced to offer such premiums as will induce farmers to make thorough trials of this rich and sweet root. There is no doubt of its fattening qualities for swine—and as to the certainty of raising as many as a thousand bushels per acre on the best kind of land, this must be tested by repeated experiments—and these experiments should be instigated and fostered by our county societies, which receive a very handsome sum annually from the State Treasury.

In regard to September, or fall sowing of

the parsnip, we have made no trials on our own farm. But we know that the grown carrot will not be injured by remaining in the ground in the ground where it grew through the winter.

Now if the seed may be safely sown in September, the advantages of such a practice must be obvious to every farmer and gardener. For the frosts of November will do all the first weeding (the principal difficulty in such crops) and the root will have a long season to mature its growth. We hope many of our farmers will try the experiment of a patch in September, whether or not the county societies may think it too small a matter for them to notice.

Let the ground be prepared and sown in September, and we have the same advantage of the weeds as we have when we sow grass seed in that month. The winter frosts kill all the weeds and leave the grass alive. No mowing grounds are so free from weeds as those which are seeded down in August or September.—*Mass. Plowman.*

Our Department at the State Fair.

There was a grand show of fruit at Springfield. Plenty of large apples, and some of them very good, if not of the best sorts. Indeed we never saw larger or fairer, of most of the varieties exhibited; and some were unparalleled for size and beauty, clearly showing the effects of soil and climate; though 'tis probable that sparseness of the specimens on the trees helped a little in some instances. The monstrous pippins, so much admired by the crowd, were neither larger nor better however, than the same variety elsewhere—and we are sorry to see so many of them on exhibition in a region where the best fruits are large enough in all conscience.

The vicinity of Springfield furnished a good share of the show, but more distinct localities made up the list of varieties. St. Louis, Alton and Quincy were well represented in quantity, and more creditable in variety also. We recollect only two collections at Springfield, forwarded from the Chicago exhibition—the one originally from Syracuse, N. Y., and the other from Sterling, Whiteside & Co., Ill. We had hoped to see fruit from the most interesting region known as Lower Egypt, which we believe is yet to be the garden of Illinois. There were a few splendid specimens of late-keeping apples from Marion County, as firm and rich, and as free from spot or symptom of decay as the same sorts around Springfield. Is it not very probable that winter apples may be profitably grown somewhat further South than we have hitherto supposed? Another year we may expect to see the late fruits of the Southeastern portion of the State, and settle this and other points of interest.

The show of Illinois PEARS may as well be passed in silence; and little can be said of PLUMS and PEACHES, except that it was too late in the season for either; and yet we expected something better in the way of the showy late sorts.

Fine QUINCES were not wanting; and our more Southern friends treated their Northern brethren to an interesting display of native fruits—the pawpaw, persimmon, &c., for which they have our thanks, and should have had a premium. Mr. Stewart of Quincy, showed ripe FIGS grown in the open air, by bending down and covering in winter. To most these were a great curiosity.

GRAPES were not abundant. Mr. H. L. Brush of Ottawa stood a long way ahead of all competition in both grapes and wine; and his samples of both were highly creditable, though scarce equal to what he exhibited in Chicago.

Now, our readers will please understand, that the fruit show at our first Fair was, rather a GOOD ONE, but *not* what it should have been as a whole. We must do better another year; and yet, had it not been for the fruit men, the region round about floral hall would have drawn few visitors. One of the two permanent sheds was offered by the general committee for the display of fruit, and was refused, on the ground that every inch and more of that closely covered space would be required for farm products, household manufactures, &c. We accordingly built a range of open stalls for the fruit, where it was somewhat damaged by the rain, and rather badly set off in respect to appearance. The fruit growers made no complaints, however, and were probably as deeply mortified as the managers of these departments when it was seen that we might have used the space resigned with much more convenience to ourselves and credit to the State Society. There was literally nothing worth the name of 'farm products' or vegetables, with perhaps a half a dozen honorable exceptions; and the line of domestic manufactures were scarcely more creditable—and to these interests the fruit men deferred; and these meagre displays were awarded and received premiums, while the fruit committee being better informed in regard to the rules of the Society, awarded comparatively few premiums, and consequently many deserving collections got no particular notice, and some of the best were ruled out altogether. This was unavoidable—the committee could not do otherwise; nor could the Executive Committee of the State Society very well avoid paying the much larger premiums on other articles which the awarding jury *ought* to have ruled out, but did not. All this we shall try and remedy another year.

The less we say about the vegetables the better. There were magnificent specimens of seed corn, and 'tall corn' on the benches surround-

ing Floral Hall, where there *should* have been vegetables. Also a richly laden branch of the Maclura, the fruit well seeded, and a plant of the Japan pea, all from Mr. Ingersoll, near Alton. We were glad to see the Osage Orange ripening its seed in Illinois; as it is only successive reproduction from seed that plants are acclimated.

Perhaps we may as well plead the previous drouth and early frost as an excuse for the wonderfully meagre display of Illinois flowers at the Illinois State Fair. The Messrs. Sigerson of St. Louis, had it all their own way at first. Considering the distance, &c., they made quite a little show of their own specimens; and in one very good feature it was the best we ever witnessed—they surrounded the floral hall with a perfect belt of Evergreens in tubs, mostly native species and admirably grown. We were particularly pleased with a species (?) of round headed arbor vitæ, from Minnesota.

Mr. Doyle of Springfield, came in at the 'eleventh hour,' with a few cut flowers and green house plants; but after all the Messrs. Sigerson deserve the credit, though through mistake or misapprehension, they got no premiums. This too, will be remedied, and the mistake rectified. The injustice in this case, lies not at the door of the examining committee, however.—*Dr. Kenicott, in Prairie Farmer.*

SOURING FOOD FOR CATTLE AND HOGS.—The cause is rather remote upon which this principle is based. It is asserted upon good authority that Rye, Barley, or Indian Corn meal made into mush and allowed to ferment and pass into the same state, when mixed with cut hay, straw, or other dry vegetable food, exhibits the most marked fattening effects. A very consistent and observing friend of ours remarked the other day, that he could with barley meal alone, properly fermented and soured, make hogs as fat in three weeks, as they could, or ought to be, and that he preferred such process to cooking the food or any other method.

It is a familiar fact to all feeders of swine, that sour and coagulated milk is worth one quarter more for those animals than fresh and sweet milk; but how its action in that state is to be accounted for, and its operation on the animal economy of the stomach is not very apparent. It is known by the experiments of Dr. Beaumont, that milk, and all substances capable of coagulation, are almost instantly changed on mixing with the gastric juice, and the rejection of milk by the infant immediately after sucking also shows that fact.

Now whether the souring of the food relieves the action of the digestive process, or whether the acetic, malic, or other acids are required

by the stomach to effect secretion or stimulation, are simple conjectures. With the human subject, pickles are a favorite condiment with rich and highly concentrated food, and many delicate stomachs can endure the use of large quantities of these most indigestive and nutritive substances, without experiencing any deleterious effects. It is generally held, that those persons who consume much acid food and use vinegar and pickles freely, are apt to be thin and spare, contrary to the doctrine of souring food. We once knew a young lady so fleshy and full of 'blood and blue veins,' that her skin was almost to the tension of bursting, who reduced herself to very respectable wasp-like dimensions, merely by the free use of vinegar.

Of the good effects of this souring process, when used for fattening animals, we have the most abundant proofs in our own experience, and although the *modus operandi* is not so clear to our perceptions, it is, we opine, sufficient for us to know that such is the fact, at least from its assertion by good authority, to induce our readers to try its effects and economy.—*Wool Grower.*

Concrete Cellar Bottoms.

The facility and cheapness with which the bottoms of cellars may be made clean, sweet and impervious to water, is generally but little known to house owners,—nor the ease and certainty with which water may be excluded from cellars where it is difficult to drain.

In soft and pervious soils, this process is best performed by paving with small stones laid in sand, but in common compact soils, the natural surface, well leveled, will answer all purposes. Make a thin mortar with water lime and coarse sand, of the consistence called *grout*, or so thick that it can be poured from a pail on the ground. Commence with a portion of about eight or ten feet at one end, and throw on sufficient to cover it an inch or more thick, and with a scraper, or rake-head, spread it evenly and smooth; then throw on as much clean, coarse gravel as it will absorb, and so continue until it is finished. In twelve hours, or as soon as it has set, sweep the overplus gravel evenly over the surface and tramp it down with a short plank and a pounder, until it is smooth and compact, and in a few days of good weather it will become like a solid rock. It assists its durability and firmness, to give it several good dashes of water after it is dry.

To render the sides impervious to water, where drainage is difficult or costly, requires that the wall should be laid with mortar originally; and at the time of constructing the bottom, a good, well proportioned water lime mortar should be plastered on a little higher

than the source of the water, and well and firmly slicked down when about half dry, and followed by another coat of the same: when if a proper time intervenes before there is any outward pressure of water, it becomes tight as a barrel or a tub, is always sweet, clean and cool, and no vermin can enter or find lodgement.

The sand used in the grout should be coarse clean and sharp, and the gravel from the size of walnuts down to coarse sand.

Something for Farmers.

We saw, yesterday, the model of a machine for cutting corn in the stalk. It is partly upon the plan of Mr. McCormick's reaping machine, and is designed to cut two rows of corn at a time. Between two wheels there is an axle, to each end of which is attached a knife for cutting each row of corn. To the axle is also attached shafts for the horse which pulls the machine. The horse walks between the rows of corn, and the knife just on the inside of each wheel cuts the corn which falls on a bed or place to catch it, in a manner resembling a wheat reaper. The bed which catches the corn, opens in the centre, at the pleasure of the operator, to discharge the corn in bundles. We are informed that with one man and a horse the machine will cut 20 acres of corn per day. It is the invention of a citizen of Illinois.—*Rich. Enquirer.*

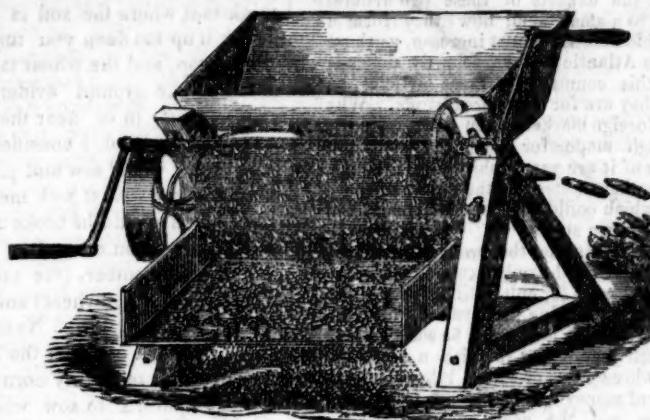
DEATH OF THE ROOTS OF TREES.—In the spring of 1850 I removed an apple tree which was growing on a gravelly ridge, to a place prepared for it a short distance from where it was taken. The tree was six inches in diameter, had been planted, I should judge, about 20 years, and had been top-grafted a few days previous to its removal. The tree and most of the grafts set in it are growing thriflily.

In the place where the tree stood, I sunk a well and in the digging traced the roots of the apple tree downwards to a depth of over twelve feet below the surface of the ground. My attention was called by the appearance of the roots, as the workmen were going on with their work, and a measurement was made. How much deeper the roots could have been traced I cannot tell, but I was well satisfied that they did extend some little below the measurement. From the great loss of roots, by their spreading so deep and wide, I had little expectation of saving my tree, and still less the grafts so recently set, but was most agreeably disappointed in both. S. S.

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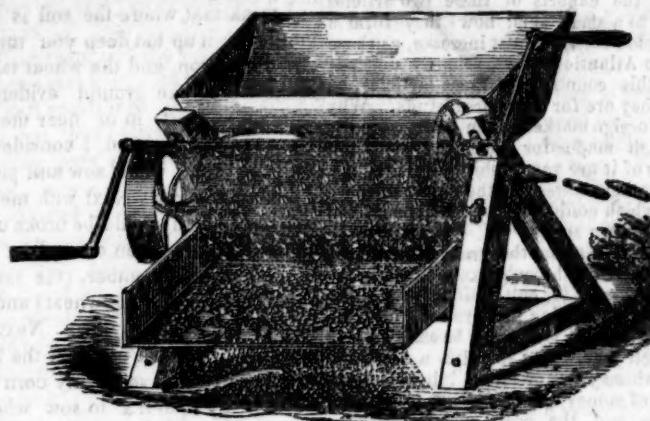
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The prices of butter and cheese have advanced fifty per cent within a few years, and continue firm, and will doubtless do so at the pre-

sent prices, because the demand from England and California is yearly increasing. A few years ago the exports of these two articles amounted to a small sum; now they form a considerable item, and must increase, as those beyond the Atlantic are marvelously dependent upon this country for those articles, as much as they are for our breadstuffs. Why look to a foreign market, when there is really not enough made for home consumption. Many tons of it are yearly shipped to St. Louis and the southern states, for the supply of those sections, which could be more readily supplied from the western states.

It is well known that the prairies are divested of timber, and the only expenditure in labor in preparing it for cultivation, is breaking up the sod, and fencing the ground, and the quantity of tillable acres may be easily added thereto each year. Not so with a timbered country, where years of severe labor and expenditure of money are necessary to prepare a few acres, and the easy culture of even those, impeded by the undecayed roots and stumps. There is one thing certain, that if the dairy business should not succeed, the land can be easily diverted therefrom to grain culture. Where capital sufficient is not in the possession of one, let two or more unite and form partnership, as is done in other kinds of business.—*Country Gentleman.*

For the Valley Farmer. Wheat and Chess.

MR. EDITOR.—Sir:—I have had in contemplation for sometime to write you few lines, upon the article of wheat; the manner of putting in, the cause of chess, &c.

First. As to the manner of putting in wheat. I see an article in the Nov. number of the Farmer in reply to an inquiry in the Sept. number, as to the manner of putting in wheat in clover ground, which I consider the best ground for wheat, but I disagree a little with that gentleman as to breaking up the ground. He says, ‘to break up very deep, I would say, if your ground is good deep rich soil, break it up as deep as possible, if not break it up in proportion to your soil, and either in July or as early in August as convenient, and let it lay until the first of September and sow it down and harrow in.’ I would say if the ground is cloddy so much the better, for in the winter the freezing and thawing melts the clods and the soil running down around the roots of the wheat inclines to stalk having been bitten, the cheat springs

support it through the winter, and I consider it does not freeze out as bad.

I think that where the soil is thin and you break it up too deep you turn up the clay to the top, and the wheat taking root at the top of the ground evidently drives its main support in or near the surface. Next to clover ground, I consider tobacco land the best. I would sow and plow in with a one horse plow. Next with me comes in oatland, which should be broke up as soon as the oats are taken off and let it lay until the first of September. (the time I consider best for sowing wheat) and plow it in with a one horse plow. Next comes in corn land, which I consider the last place to sow wheat, for really my corn ground is never in a proper fix to sow wheat in. I have left out fallow ground, as I consider no man should let his ground lie idle without having it in clover.

In the next place I propose to treat of the article of chess or cheat. If you would listen to the awful tales of some farmers you would believe that they had been badly dealt with by somebody, some way, or some how, for they really sowed wheat and lo! they reaped chess. You have learned by this time that I am one of those that believe that wheat makes wheat, and that chess makes chess, or cheat, to use the common phrase of the country, and nothing else. I now propose to take up the argument of those cheated gentleman and answer it at least to my satisfaction.

In the first place I propose to say something about the Hessian Fly making cheat, for I believe that it has been the principal object upon which the cheated gentlemen have heaped their curses, this last crop, I had the pleasure, or misfortune, of being in the field of one of those who had been cheated by the Fly, and he actually swore that they should have no wheat next year out of which to make cheat. We commenced looking for the Fly, and really they had ruined his wheat, but when we came to examine into the cheat not one egg could we find in it. But they say the fly changes the wheat into cheat, and therefore the cheat springs

in and up the long root drives surface. tobacco in with comes in as soon play un- I con- slow it comes in place round is in. I rider no without t of the would farmers en bad- way, or wheat learn- use that and that use the nothing the ar- and an- some- cheat, incipal men crop, I being d been swore at year com- they came could changes e the springs

up from the root, and you cannot see where the fly made its depredations. But any man that has examined the depredations of the fly knows that it lays its eggs above the first joint and sometimes above the second joint, and that they always find the old stub standing there with the egg in it, and sometimes you will find a stalk with a tolerable good head in it, with the fly egg in it, but not having been injured enough to destroy it, but in either case if the wheat made the cheat on account of the fly, the old stub or the stalk of the wheat with the fly in it would be connected with the cheat at the root, a thing that no man on earth ever saw or will see for it is not according to nature or the good book, and all a man has to do to convince himself is to examine it. And I would say that while in the field, that gentleman put the question to me how came the cheat there, or what made it if the wheat did not, for, says he, I sowed oats last year and not one particle of cheat was mixed with them.

I asked him and would ask every other gentleman if the hog weeds that are so common in wheat patches were in his oats. He said there were not. We then went and examined a piece of timothy meadow which he had sown in one corner of his field, and we there found the cheat as thick in the meadow as in his wheat which I think has convinced him (and should convince every man) the fly did not make it, for there was no fly in his meadow. Now I think it very reasonable to suppose that the chess and the hog weed seed were both in the ground before, and all that was wanted to bring them forth was for the ground to be in a proper fix to produce them. I take this field because it was one that was a good deal talked about at the time, but the argument would apply to any and all. The next argument on the list with these cheated gentleman is that pasturing wheat after it begins to joint will produce chess. One will tell you he had his horse in one corner of his field in May or June and behold it all came cheat. Another will tell you that he let his sheep in; ewes and lambs — and behold where he turned them in and

out it all turned to cheat. Another will tell you that his wife had some geese that went into his wheat patch during the Spring, and when the wheat come to head why it was all cheat. Now according to these gentlemen's tales they have been badly dealt with, or at least they have dealt badly with themselves, just as though the nip of a horse or the bite of a sheep or goose would produce chess. Really one would suppose to hear their tales, that the old goose was famous for cheat. In the next place, some will tell you that he sowed his wheat with not a particle of chess in it [hardly] and behold, when he come to reap it, it was a third cheat. The winter was so hard on it that it killed the main root and when it came up from the little fibers or roots that it became cheat. Now these arguments, if arguments they be, look to me to be very weak indeed — though I was raised to believe them. Now we know that when a man takes his his horse into his wheat field to graze, he generally lets him graze at or near the the gate, and that the chess is apt to be spiled around there and to get a start and that when the wheat is killed out by pasturing that the chess grows more luxuriant, and soon the ground becomes full of it and only wants for the wheat to be eat out of the way by the horse, sheep or goose, to produce an abundant crop.

Now so far as relates to killing the main root, and turning it to cheat, every one knows that knows anything about wheat, that when the main root is killed out that bunches of wheat die altogether and that the little roots that are left would not produce a sprout were they to remain there sound forever. But this gentleman has been somewhat cheated by the winter, but not in the way he thinks. I would venture that any farmer may count his wheat that he sows on a piece of ground and count the bunches of wheat the next summer and if as good year for wheat he will find that at least one third of his wheat has been destroyed by the winter or by some other cause which leaves him but two-thirds of his wheat to contend with the chess he left in it. But suppose that the winter is a hard one and

he will not have one half or perhaps not more than one third of his wheat to contend with his chess. Now let us suppose that he had one tenth of his wheat chess, and that two-thirds of his wheat died out on account of the hard winter and we have nearly one third of his crop, chess to say nothing of the chess that was in the ground or of the abundant yield of the chess over the wheat, which every farmer knows is a matter of fact.

I would ask those farmers that believe that wheat makes chess, what is the cause of rye gaining so on wheat, for you may put one grain of rye in a peck of wheat and in less than five years, unless you pull it out it will have the ascendancy and I believe that it is generally given up that wheat out produces rye, whereas chess out produces wheat. The same may be said of cockle, for when you once get it on your farm you can hardly ever get clear of it, and you will find it very much like chess coming in your wheat only.

I have done with their arguments, and propose to give my reasons for believing that wheat makes wheat and nothing but wheat. In the first place I was told that chess would not produce, that it come from wheat and that like all other mongrels it stopped there, but upon trying it I found it to produce and make an abundant crop. I then tried wheat by picking the chess out of it, and I find that if you will clean your ground of it, and your seed wheat also that you will never have any chess, notwithstanding the fly, horses, sheep, geese and winter all be turned in on it once, but you may have a great quantity of chess, in your ground and it may lie there for several years before it will come up, but when the ground becomes in a proper fix to produce it here it comes, and I verily believe it will be in the ground for twenty years and then come up. I know that clover seed will lie from ten to fifteen years in the ground, and then come up, and I do not see why chess will not lie as long. It is much better shielded than the clover seed, and I know one of my neighbors who sowed a piece of land in hemp; cut it off and the next year he put

the ground in tobacco, tended it well and that fall sowed it in wheat, and the next year when he went to cut his wheat the hemp was so thick amongst it that he could not cut it, he let it stand, and it made a very good crop of hemp seed, now if hemp seed which is considered the easiest to heat and spoil, will lie two years in the ground and then come up, how long will it take a grain shielded as chess is to rot.

I would now ask those cheated gentlemen to tell me where the purslain that he finds in his tobacco field when he tends it well comes from, if the seed is not in the ground, waiting for the ground to become in a proper fix to produce it.

Now let me say a few words as to the manner of preparing your seed wheat, and I am done. I see some one in one of the numbers of the Farmer during last summer telling how he prepared his, by taking all the riddles out of a fan and running it very fast, so as to produce a very strong wind and then taking up the but of the pile, which is a very good plan for the present; but I would say when you go to thrash your wheat take the bundles and pull out enough heads to make wheat enough to sow a piece of ground sufficient to make enough wheat to sow your next crop and if possible to have your ground clear of chess.

I am now done Mr. Editor, and should feel very much like asking your pardon for writing you this untimely piece, was it not that Christmas is near, and every one is looking out for his Christmas cake.

ONE OF THEM.

Howard Co., Mo., Dec. 10, 1853.

The rage for cattle breeding has reached an extreme point in England.—For a cow and calf, the sum of five thousand dollars were lately paid, and at the same sale several bulls brought prices ranging from fifteen hundred to twenty five hundred dollars.

SUGAR.—The Plaquemine, (La.) *Young American*, of the 30th ult., says: Many of our planters will finish grinding in a few days. The sugar generally that we have seen, seems to be of an excellent quality, but there will be a general falling off in the number of hogsheads made throughout the parish.

The Valley Farmer.

ST. LOUIS, MO., JANUARY, 1854.

The Law of Newspapers.

1. Subscribers who do not give express notice to the contrary are considered as wishing to continue their subscriptions.
2. If subscribers order the discontinuance of their papers, he publisher may continue to send them until all arrears are paid.
3. If subscribers neglect or refuse to take their papers from the office to which they are directed, they are held responsible till they have settled the bill and ordered the paper discontinued.
4. If subscribers remove to other places without informing the publisher, and the paper is sent to the former direction they are held responsible.
5. The Courts have decided that refusing to take a paper, from the office, or removing and leaving it uncalled-for is prima facia evidence of intentional fraud.

Subscribers will therefore understand—

1. That their papers will be continued after the expiration of the time for which they have paid unless otherwise ordered.
2. That no paper will be discontinued until all arrears are paid up to the time at which the notice is given, unless we are satisfied that the subscriber is worthless.
3. That when the paper, through the fault of a subscriber, has been suffered to overrun the time, the just and most convenient way is to remit one dollar for another year with directions to discontinue at the end of that time.

WHAT KILLED THEM?—The letter of our friend, "A Farmer of Osage," will receive attention in our next.

MISTAKES will happen, and consequently, pages 37, 38, 39, and 40, in this number are pages 21, 22, 23, and 24.

See the advertisement of Dr. Warder's Review in our paper.

BUCK'S STOVES.—Having had one of these stoves in constant use for two years and a half, we can speak from experience of its merits, and we do say that we honestly consider it superior to any we have ever had any experience with in at least three particulars.

1st. *In its efficiency.* A greater amount and variety of food may be cooked with it than with others. Its ovens are very large, capable of holding four good sized pies in the lower oven, while at the same time a brace of fowls may be cooked in the upper one, and the tops, bottoms, and edges of your pies are all equally cooked.

2d. *In the saving of fuel.* From the peculiarity of its construction one half the fuel used in the common cooking will suffice to cook a meal in this.

2d, *In its durability.* Our stove has been in constant use two years and a half, and most of the time it has had pretty rough usage at that, and yet every portion of it is whole and uninjured. Usually from two to three years is time enough to use up a cooking stove. By that time the oven plates are burnt out, the hinges are broken, the dampers are out of fix, the top has "caved in" and "there is no use talking about it: we must have a new stove, or we can't have any good break." But in this stove, with the exception of the breaking off the handles of the griddles, by letting them fall on the flour, and the destruction of the gridiron, by throwing wood on it, every thing about the stove and furniture is as sound as when it came from the store. We therefore recommend all housekeepers to call upon Messrs. Buck & Wright, and procure a stove "as is a stove."

Scraps from the Newspapers.

Some one having suggested that the administration of chloroform to bees would put them to sleep long enough to obtain their honey, a writer in the Boston Cultivator says that he has tried the experiment with perfect success—the bees went to sleep, and have slept soundly ever since.

A CURIOSITY.—One of the most astonishing curiosities ever exhibited in this country, can now be seen at the City Hall, Baltimore. It is the body of a man found buried six feet in guano, on the Island of Ichaboe. It is petrified and turned to a solid stone, retaining all the minute outlines of a perfect specimen of humanity. It has been examined by physicians and scientific men, and pronounced one of the most marvelous subjects ever witnessed.

WESTON AND ST. LOUIS RAILROAD.—A meeting was held lately at Liberty to consider the project of building such a road as indicated in the caption. Speeches were made by Col. Doniphon and others, and delegates appointed to a proposed Convention of the people interested in the road. The route as projected passes down the tier of counties on the north side of the river and intersects the North Missouri Railroad in Callaway county.

TURKEY DRIVING.—The Chattanooga Gazette says: A monstrous drove of 2,100 turkeys from Rutherford County, Tenn., and vicinity, passed through this city yesterday, en route to Augusta and Charleston. On Saturday last, 500 others started South and still they come.

The Family Circle.

Conducted by
Mrs. MARY ABBOTT.

New Year.

"Time is ever on the wing."

Again we have come to the commencement of a New Year, and how many of our friends and subscribers have gone where time to them will be no longer? and how many of us who remain will live to the close of this is known only to Him in whose hands are all our lives. The beginning of a New Year is a time when we should be cheerful and serious—cheerful to think that we have been spared yet another year and received so many mercies; and serious when we consider this year, perhaps, will tell the number of our days. And to what end have many of us lived? Will our friends and the world feel a loss when we are called to leave the things of time?—Perhaps many of our readers and the hand that now writes will be cold in death before this year will have run its yearly rounds. If so, may we not have lived in vain! Let us set out at the commencement of this year with new and strong resolutions that our friends and society shall be benefited by our living.

We have been greatly encouraged during the past year by the kind approbation of our friends, and we hope if we live we shall continue to deserve it, for it is the sincere desire our heart to be of some real benefit to our friends and society so long as we shall continue to exist. If our lives are spared another year we shall try to make the FAMILY CIRCLE more interesting, by devoting more time to it, having more pages, and a greater variety of matter.—We close this humble article by wishing all our readers a happy new year, which we hope will be reciprocated.

To CORRESPONDENTS.—We have lately received several articles for our department of the paper, but it being the last month of the year we had not room to insert them.

They will appear as we have room in future numbers. We hope our friends will not feel discouraged at not seeing them sooner, but will send us such articles as are adapted to our department, which we shall thankfully receive.

Stores.

As we have heretofore promised our friends that we would give some notices of stores that we could recommend, we now at the commencement of a new year fulfill our promise.

Dry Goods.—We still feel it our duty to recommend Mr. Hoit, No. 212 and 214 Broadway, as having the best variety of domestic articles both for families and servants; and we advise all our friends who have large plantations, and consequently many servants, to give Mr. Hoit a call when they visit the city. We are persuaded they will be fairly dealt with. He has fancy goods of every variety, and keeps constantly on hand rich dress goods to suit every season. Mr. Hoit sells low, and has uniform prices.

Shoes.—Mr. Thayer, No. 208 Broadway, keeps every variety of shoes, both for ladies', gentlemen's, and children's wear. We think he sells a little lower than most shoe stores with which we are acquainted.

Groceries.—We cheerfully recommend Messrs. Lynch & Tanguay, of the Old Post Office Grocery, Chestnut street, as having the best and greatest variety of any establishment we know of in the city. Every thing and anything which can suit the taste or satisfy the appetite of the epicure or the invalid can be found there. Those who have been brought up at the East, and can appreciate the merits of oysters, lobsters, salmon and cod, will do well to call and examine for themselves, as we think they keep the best we have seen since we have been in the West.

They very politely sent us a jar of lobsters which we thought almost as good as eating them in our native city. We take this opportunity to thank them for their present. They are gentlemen, deal fairly,

and sell cheap, and we hope our friends will try them, as we are sure they will be satisfied.

PUBLICATIONS.—Mrs. Whittlesey's Magazine and the Mother's Magazine are regularly received by us, and we think they are the means of doing great good. We wish every mother in the land would take a copy of them. We also receive the Youth's Companion Student, and Merry's Museum, all of which are doing an important part in the education of the young. We wish them great success in the great cause in which they are engaged. The *Family Visitor*, from Hudson, Ohio, and Moore's Rural New Yorker, from Rochester, N. Y., we think model family papers. We are always glad when we receive them. We used to receive the *Olive Branch*, until we gave it extensive notices, since which time it has ceased coming. We think this rather ungenerous payment for recommending it. It shows its selfish disposition.

Washing Machine.

We have lately purchased of Mr. Hartshorn one of Sabin's Patent Washing Machines, which we think exceeds any thing we have yet tried. This week we had washed between the hours of seven and half past ten in the morning, 112 pieces, with two inexperienced hands, who were not equal to one experienced person. The clothes were well washed, and needed but one wringing. It is simple in its construction and very cheap. It will pay for itself in any family, in a short time, by the saving of time, labor, and soap. We cheerfully recommend it to all our friends.

Take Care.

"There, I never did see such a—good-for-nothing, hateful boy; I believe you are the greatest plague—"

"Take care, take care, madam; what has the little fellow done? take care not to disportion the reproof of the offence!"

"Done? why he has done nothing but torment me all day. He waked me up with his noise before daylight, and what with his jumpings and screaming, and scratchings, there was no

peace till he was up and dressed. And then I couldn't enjoy my breakfast in peace, because his mouth must be kept full, or there was a sad noise for an aching head; and then since breakfast, he has done nothing else but tottle around into all conceivable mischief. He has overset my work-basket, and tangled my skeins, unwound my spools, and lost my needles, and dropped my scissors down the register, and thrown my thimble out of the window, and tipped over nearly all the chairs, and torn every book he could lay hold of, and—there, I don't mean to be cross with my baby, but I do believe he is the uneasiest child that ever did live, and—and I know I was never made to be a mother, and have the care of children. I haven't any tact or patience equal to it. I don't know how these pattern mothers do it, but I can't."

This was the colloquy of our overhearing that took place the other day in the presence of a great fat-faced, hearty, restless-looking little fellow, who had provoked the same by his locomotive and upsetting tendencies.

Poor mother, thought we, you haven't learned the genuine secret of managing children yet. Your little boy *must be active, every moment*. If he did not perpetually do something to exercise these little muscles, and develop that healthy frame he would die. Don't scold at him and try to keep him still, but avoid the inconvenience which arises from his misplaced activity, by keeping him active in the *right place*. The great recipe that never fails for taking care of children pleasantly comprises kindness in the voice, patience in the heart, and ingenuity in the intellect to contrive methods of perpetual activity. If you put your child into a room full of ordinary matters, and do not give him an abundant supply of matters which are *his*, you need no more marvel that he should be mischievously busy in touching what he ought not, than that he should eat what he ought not when he is starvius, and you put him where he can get hold only of improper viands.

Children have vast imaginations. It is astonishing how easy a dilapidated broomstick becomes a horse, and any little bunch of rags a doll, and how much comfort can be taken by the little folk from a supply of playthings, of very humble mechanical or artistic pretensions. But *something* children must have. If they cannot fill their hands honestly, if there is not a plentitude of "traps" which are distinctly theirs, they will, as a matter of course, foray among the miscellanies of their adult relatives and friends; and scissors and thimbles, and spools and books will suffer according.

Mothers must not be much distressed at having the nursery floor "littered up." Better keep a cart load of playthings in general circulation

over the carpet, that to be under the necessity of getting bad-tempered and showing it.

We know a boy who was made permanently crusty by his mother's insane horror of anything loose about the room. Nature would have its way, and as the little fellow could not satisfy nature in the ordinary methods, he took to contrivances which were stigmatized as unaccountable and intolerably mischievous, and was scolded accordingly, until the sweet milk of his disposition gradually curdled under the influence of a chronic thunder-storm of fulminated exhortations to "keep things to rights." Things were kept so ferociously "to rights" that the thing of the most import, the little immortal mind, was shaped irresistibly to wrong.

Plenty of patience and plenty of playthings is, after all, the great motto for the nursery.
—*Genesee Evangelist.*

Be True To Thyself.

These words ought to be engraved with the point of a diamond upon every heart, and painted in letters of fire so he who runs may read. They embody more of philosophy, morality and religion than any other four words in the English language—more than mortal ever put in practice. They comprise the whole law of duty to self, to our fellow-beings and to our Creator; for he who is true to himself, cannot be false to others or to God. To be true to our own convictions of right, true to the dictates of our better judgments, true to the instincts of our own hearts, is to be all that humanity can be—it is ideal manhood. As perfect truthfulness is the height of human attainment, so is falsehood to one's self, the greatest sin—that which underlies all others. The most trivial faults as well as the worst crimes are examples of falseness to our better nature. We cannot do wrong without disregarding that still "small voice" within us, which despite our attempts to stifle it, ever whispers us on to purity, goodness and truth.

Be true to thyself! Whatever others may say; never fear to act decidedly and manfully as conscience directs. If you yield your own convictions of duty to please another, you make yourself something less than a man—the tool and slave of one whose teachings are in opposition to the voice of God within you. If you depart knowingly in a single instance from the path of right, you are false to yourself and have no surety for the future.

Be true to thyself! In other words maintain at all hazards your self-respect—cling to it as your best safe-guard from temptation, as your firmest support in all situations. Self-Respect! what is it but the consciousness of acting from high motives, and discharging

assurance we have within ourselves that we have been true to the work which has been given us to do. Lose it, and everything is lost; cherish it, and you have everything to hope for; lose it, and your path will be strewed thick with thorns, and your bed with nettles; retain it and you may walk in your Eden at the cool of the day and listen to the approving tones which will be wafted to you on the still evening air.

Be true to thyself! You cannot trust to another, even though he be wiser than yourself, to guide your course. For what purpose was a mind given you, but to think for yourself, to reason for yourself, and to decide for yourself? Take counsel from the wise and good, from the plant which, in obedience to its own laws, produces in their season the blade, the flower and the seed; but most of all, with your own conscience, for by that must you stand or fall.

Be true to thyself! Does your heart prompt you to an act of kindness or sympathy? Do as you would be done by, and though the object of your charity prove ungrateful, you will still have reward in the satisfaction of having felt kindly and acted sincerely. Have others been false to you? Do not make yourself equally base by betraying their trust now that they no longer merit your confidence, but rather show your honor and superiority by maintaining your integrity, and being ever true to yourself. Have those from whom you expected kindness been harsh towards you? Show your contempt for their treatment by carefully avoiding their error, and thus heap coals of fire on their heads.

Be true to thyself! When convinced that you have been in the wrong, do not hesitate to acknowledge your mistake; for he who confesses to the short-comings of yesterday, proves himself wiser to-day. He who endeavors to sustain a false position, is a traitor to his own conscience, plays the hypocrite to himself and will eventually expose his own baseness, and lose not only his own self-respect, but the confidence and esteem of those who know him.

Be true to thyself! There are those who make their whole lives a perpetual lie. Their words belie their thoughts, their acts are a libel on their motives, their tongues drop with honey when their hearts overflow with gall.—The smiles upon their features and the treachery which lurks in their eyes are constantly playing at cross-purposes; outwardly they are whitened sepulchres, fair to look upon; inwardly they are full of dead men's bones and all uncleanness. Like Judas, they cry, Hail Master! and kiss those they would betray and murder. As you loathe a character of this stamp, avoid falseness to yourself, as you would "the worm of the still." The first

with a single aim the duties of life! It is the act of self-treachery is a poison in the blood, which taints your whole being and plants corroding remorse in the very centre of your soul.

Be true to thyself! So will you make your life happy, harmonious, beautiful. This world is false only to those who are false to themselves. It is full of discord only to those who never tune their hearts to the chords of truth. It is full of deformity only to those who make their spirit the abode of evil. Then let him who, while he journeys through this else dark world, would have his pathway strewn with flowers, and lighted by that undying flame which issues from the throne of God, study his own nature, reflect upon its mysterious organism, learn its wants, and first of all be true to himself.

CHEERFULNESS.—The blessed results of cheerfulness can be seen in every family where it uniformly prevails. Unless the husband is a brute, the bright cheerful smile and the kindly greetings of the wife, when he returns worn, weary and dispirited it may be, from the scene of toil, will drive the cloud from his brow like mist before the rising sun. Its reflex influences will in the end effect a change even in a disposition naturally morose, so that the man who has a cheerful home to go to, will eventually become a kinder husband, a more valuable citizen and a better man.

Valuables Recipes.

INDIAN FLAPPERS.—Have ready a pint of sifted Indian meal, mixed with a handful of wheat flour, and a small tea-spoonful of salt. Beat four eggs very light, and stir them by degrees into a quart of milk, in turn with the meal. They can be made in a very short time and should be baked as soon as mixed, on a hot griddle; allow a large ladle full of batter to each cake and make them all of the same size. Send them to table hot, buttered and cut in half.

HOE CAKE.—Beat the whites of three eggs to a stiff froth, and sift into a pan a quart of wheat flour, adding a salt-spoon of salt. Make a hole in the middle, and mix in the whites of egg so as to form a thick batter, and then add two table-spoonfuls of the best fresh yeast. Cover it, and let it stand all night. In the morning, take a hoe-irn (such as are made purposely for cakes) and prop it before the fire till it is well heated. Then flour a tea-saucer, and filling it with batter, shake it about, and clap it to the hoe, (which must be previously greased,) and the batter will adhere till it is baked. Repeat this with each cake. Keep them hot and eat them with butter.

BAKED APPLE DUMPLINGS.—Take large, fine juicy apples, and pare and core them, leaving them as whole as possible. Put them into a kettle with sufficient water to cover them, and let them parboil a quarter of an hour. Then take them out and drain them on a sieve. Prepare a paste in the proportion of a pound of butter to two pounds of flour, as for plain pies. Roll it out into a sheet, and cut it into equal portions according to your number of apples. Place an apple on each, and fill up the hole from whence the core was extracted with brown sugar moistened with lemon-juice, or with any sort of marmalade. Then cover the apples with a paste, closing it neatly. Place the dumplings side by side in buttered square pans, (not so as to touch,) and bake them of a light brown. Serve them warm or cool and eat them with cream sauce. They will be found very good.

INDIAN CUP CAKES.—Sift a pint and a half of yellow Indian meal, and mix it with half a pint wheat flour. Beat two eggs very light, and then stir them gradually into the meal, in turn with almost a quart of *sour* milk. If you have no sour milk from the preceding day, you can turn some sweet milk sour by setting it in the sun. Lastly, dissolve a tea-spoonful of sal-aratus, or a very small tea-spoonful of pearl-ash in a little of the sour milk reserved for the purpose. The batter must be as thick as that for a pound-cake. More Indian meal may be necessary. Stir it at the last into the mixture, which, while foaming, must be put into buttered cups, or little tin pans, and set immediately into an oven, brisk but not too hot. When well baked, turn out the cakes, and send them warm to the breakfast-table. Eat them with butter.

Preserving Eggs.

Knowing how much trouble a good many housewives have in keeping eggs good through the winter, I send you the following receipt to publish for their benefit. It is simple but effectual.

Wrap each egg closely in a piece of newspaper, twisting it tightly to keep out the air; place them in layers in a box with the small ends down, and set them where they will be cool without freezing.

I have seen eggs kept in this way better and fresher than those laid down in salt; besides you are not troubled with the salt adhering to the shells, which is no small consideration to those who have the handling of them. You have only to untwist the paper and the egg comes out as fresh and clean as if just taken from the nest.

No man has a right to do as he pleases, except when he pleases to do right.

The Lost Day.

Lost! lost! lost!
 A gem of countless price,
 Cut from the living rock,
 And graved in Paradise;
 Set round with three times eight
 Large diamonds clear and bright,
 And each with sixty smaller ones,
 All changeable as the light.

Lost! lost! lost!
 I feel all search in vain;
 That gem of countless cost
 Can never be mine again;
 I offer no reward,
 For till those heart-strings sever,
 I know that heaven-intuned gift
 Is safe in thy keeping.

Yes, love thine aged—bow before
 The venerable form,
 So soon to seek beyond the sky
 A shelter from the storm.
 Aye love them, let thy silent heart,
 With reverence untold,
 As pilgrims very near to heaven,
 Regard and love the old.

As Ye Sow, So shall Ye Reap.

BY EDWARD W. CHESEBRO.

Twenty-eight years ago the coming winter, in a pleasant, pretty, little village nestled cosily among the green hills of the Old Granite State, there flourished an institution of learning commonly known as the H—— Academy. This was before the age of camphene, chloroform and railroads, and the numerous other inventions, consequently this little village of which we have spoken, was seldom troubled with noise or confusion of any kind, a circumstance that greatly facilitated the student's advancement in study.

After the autumnal work was performed, and the corn husked and snugly stowed away in the crib, the potatoes dug and deposited in the cellar, secure from the biting frosts of winter, and the last pumpkin housed preparatory to Thanksgiving, then the farmers from the neighboring country would send their sons to the H—— Academy, that they there might enjoy advantages superior to those afforded by the common schools at home.

Congregated at this institution at the time we speak of, were about fifty students, and among them were to be found James McB—— and David P——, two young men, or, more properly speaking, boys, who differed from each other essentially and totally. The former was the son of Gen. McB——, of Salem, Mass., one of the wealthiest merchants of that enterprising town, then, as now, extensively engaged in the East India trade. James had been sent to the house of his maternal uncle. Some are plowing the waves of the ocean, some are wresting life and its immunities from the sturdy forests of our native land, some are delving amid California sands, while some are sleeping "within the pale of the church-yard mold."

in H——, with the idea that it would be beneficial to his morals to live in such a quiet and retired village.

Having been brought up in luxury and indolence, caressed and inordinately indulged by his mother, as he was an only child, he was but little calculated to make a scholar. He was proud, conceited, and overbearing, disliked by most of his fellow students on account of the airs he assumed. His lessons were badly learned, if learned at all, but being a rich man's son, his misdeeds were very judiciously winked at or passed over in silence by his short-sighted teacher.

David P——, a lad of some ten years of age, and younger by three years than the boy of whom we have just spoken, was a pale, studious youth, who came every morning, whether the weather were fair or foul, a distance of two miles, in order to avail himself of the teacher's instructions. Every duty required of him was fully performed; for every recitation he had previously prepared himself. He seemed to be laboring, not merely to satisfy the teacher that he understood his lessons, but to satisfy himself that he had entirely mastered the subject. He grew in favor with the young men of the school daily.

His father, not being in affluent circumstances, David was sometimes rather scantily clothed, so that the chilling winds of a New Hampshire winter were occasionally almost intolerable to the frail boy. Yet his ardent desire for knowledge sustained him through storm and tempest, and every succeeding day of the winter term found him at his accustomed post. On one cold inclement morning, after there had been a heavy fall of snow, which made the way exceedingly troublesome, David had travelled the whole way from his father's residence to school on foot. He arrived before nine o'clock however, and found the boys standing around the stove in the school-room. As soon as he came in, they enlarged their circle, and thus gave him an opportunity of enjoying the cheerful warmth of the life-giving fire. He modestly accepted their proffered act of politeness, and took the vacant place.

In a few minutes James McB—— came in and in his usually authoritative manner thrust David from the place assigned him, using at the same time abusive and insulting language, such as, "Stand back, rag-a-muffin; let your betters come," etc. Hearing this, one of the young men interfered, and restored the boy to his place, saying, "Let David alone; he will make a man worth a dozen of you."

But time stayed not his rapid flight. Years passed on, changing academical boyhood to active manhood. The young men of the H—— Academy became scattered over the world.

James McB——, fondly and foolishly indulged while a child, became the idle and disobedient scholar, and, finally, the vicious and profligate young man. Taking offense at some judicious restraint on the part of his father, he left home and went to Boston, where he embarked on a vessel bound for the West Indies. A short time after arriving in Havana he got into a riot in company with some drunken sailors. The police interfered, but before he was taken, he received a blow, from which, about a week afterwards, he died. Thus perished untimely, ignominiously, and miserably the petted and indulged James McB——.

Let us now trace the onward course of David P——. As might have been expected, the industrious and studious boy became the active young man. The world had work for him. At first we find him pursuing the arduous and responsible calling of a teacher in a district-school, and afterwards conducting the Newburyport High School. From this important position he was called to take charge of the New York State Normal School, with this noble motto, "Succeed or die," emblazoned on his shield.

"Unresisting toil
Won on the fair trophy, as the grateful heart
Of many a youth to patient knowledge train'd
Doth testify with tears; while many a man
Crowned by his Alma Mater, from the post
Of honor and of care, rememb'reth well
Whose strong, persuasive nurture led him there."

In a midst of a life of usefulness, casting the sunshine of a cheerful heart on all around him, and exerting a salutary influence on millions of our land, God saw fit that he should exchange the realities of earth for the happiness of a sinless clime.

Young man, do you prefer the course which led David P—— to usefulness honor happiness, and heaven, to that which —McB to disgrace and infamy? Go, then and de likewise.

HOME.—As we repeat this word, we have a feeling of comfort at the heart, and bright glowing images in the mind. There is a fire on the hearth, shedding a cheerful warmth through the room. Mother sits in her easy arm chair, holding and amusing the baby with many inquiries whether it is not "its mamma onneydoney." Willie has forsaken his toys and the operation of putting "bob-tails" to his kite, and is helping Mary to get through with the "hard words," in her reading. While Tray sits near, looking as if he understood the whole lesson. Occasionally, when Mary makes a ludicrous mistake, the mother and children will laugh merrily, the baby smiling and clapping its hands, and Tray barking in harmony. It is a very happy place, this home; and the poet said with truth that there is no place like

it to be found, roam where we will. Then father comes in. He is wearied with his toil and is glad to get to his fireside. He takes Willie upon one knee and little Mary on the other. Tray settles down at his feet. Mother informs him that the baby has been so good, and he says that he knew that it was a "dear little darling." Then, while the party chat away, the servant throws open the door and informs them that "the tea is ready," and they adjourn without delay, a happy group to the supper-table.—*Illustrated Family Friend.*

BRAUTIFUL TRIBUTE TO A WIFE.—Sir James Mackintosh, the historian, was married early in life, before he had attained fortune or fame, to Miss Catharine Stuart, a young Scotch lady, distinguished more for the excellencies of her character than for her personal charms. After eight years of happy wedded life, during which she became the mother of three children, she died. A few days after her death, the bereaved husband wrote to a friend, depicting the character of his wife in the following terms:

"I was guided in my choice only by the blind affection of youth. I found an intelligent companion and a tender friend, a prudent monitor, the most faithful of wives, and a mother as tender as children had ever the misfortune to lose. I met a woman who, by the tender management of my weaknesses, gradually corrected the most pernicious of them. She became prudent from affection; and though of the most generous nature, she has taught frugality and economy by her love for me. During the most critical period of my life, she preserved order in my affairs, from the care of which she relieved me. She really reclaimed me from dissipation; she urged my indolence to all the exertions that have been useful and creditable to me; and she was perpetually at hand to admonish my careless improvidence. To her I owe whatever I am; to her whatever I shall be. In her solicitude for my interest, she never for a moment forgot my feelings or my character. Even in her occasional resentment, for which I but too often gave her cause, (would to God could recall those moments!) she had no sullenness or acrimony. Her feelings were warm and impetuous, but she was placable, tender and constant. Such was she whom I lost, and I had lost her when her excellent natural sense was rapidly improving, after eight years of struggle and distress had bound us fast together and molded our tempers to each other; when a knowledge of her worth had refined my youthful love into friendship, and before age had deprived it of its original ardor. I lose her, the choice of my youth, the partner of my misfortune, at a moment when I had a prospect of her sharing better days."

HOGS AND PRICES.—The slaughtering yesterday was not as large as the day previous, but all the houses continue in operation with constant receipts, and we learn that at least 10,000 hogs were wending their way along the turnpike from Shelby county yesterday. We hear of sales of 1,900 head yesterday, chiefly at \$4 12 and \$4 15 net, including small lots at \$4, and 600 head at \$4 25 on four months time, with interest and exchange added.

The market was firm at Cincinnati yesterday, with sales of 500 heads reported at \$4 25 and \$4 30, and the Price Current estimates a deficiency to date of 62,000 hogs as compared with the previous year.

The Madison Courier of Monday says the whole number of hogs arrived at North Madison up to Saturday night is 30,36 against 95,578 to the same date last season, and 43,201 to the corresponding period in 1851. The receipts from all sources net much below 50,000. Prices more firm to-day at \$4 and \$4 25, according to quality. At Indianapolis the prospects indicate a large business. On last Saturday as high as \$4 per 100 net was paid, but the ruling rates may be set down at \$3 75 and \$3 85, according to weight and quality.

—[Lou. Cou. Dec. 23.]

St. Louis Market.

TUESDAY EVENING, December 27.

Navigation for several days past has been entirely suspended above this point. River at this point filled with floating ice. Streams above represented as being closed, or nearly so. Receipts, of course, light, and transactions confined to a few articles only. We presume, if the present weather continues for a day or two more, that navigation will be entirely suspended. Hemp inactive—market very quiet, with nearly the same amount in store as heretofore reported—say 1,600 bales, a sale or two on private terms. No break of tobacco at either warehouse. The deficit this year, as compared with the sales of last, 2,741 hds. Lead held at \$6 35 for Galena. —On Thursday, sale of 100 bbls country flour, consisting of extra, fancy, superfine and scratcheds, at \$5 75, \$5 50, \$5 40 and \$5.—Yesterday 150 barrels, country extra, at \$5 75. Late advices from Europe more favorable. Our city mills will likely "grind out" shortly, unless navigation becomes better. Receipts of wheat growing very light, and the difficulty of shipping flour to the South becoming greater every day. On Thursday, sale of 350 sacks at 107c, and 2,200 do red and white, sacks returned, at 112 to 118c.—Yesterday, a few lots sold at 107 and 108.—To-day, 600 sks red at 110, and 250 red and white at 112 1-2, and a lot of white at 116.—

Corn very dull. About 3000 sacks sold this week to distillers at 34 to 36c. Prime white does not command over 38c. Oats 36c in second hand bags—prime lots, in good order, would command 36 1-2. Transactions limited—but one sale reported for the last three days. Barley nominally at 60 cents per bushel, exclusive of sacks. Rye 53 to 55 cents per bushel, including sacks. Bran 70c per 100 lbs. As regards provisions, we have no sales. Mess pork stands at \$11 to \$11 50, and bulk shoulders and hams 4 to 6, according to the latest reported transactions. Lard 8c, in bbls and tierces. Hogs generally at \$4 net. Whiskey 20 1-2c. Sugar 3 1-2 to 4, common to good fair; coffee 12 to 13, molasses 23.—Market quiet. Last sale of T. 1 salt at \$1 50, L. B. \$2 25. The stock of G. A. exhausted.—[Rep.

Live Stock Market. WEDGE HOUSE, Saturday, Dec. 24.

CATTLE.—Sale of 60 head at 4 to \$5 1-2, 50 do prime at 6, 25 do at 2 1-2 gross; and 60 do at same. The premium steer, weighing net 1,450 lbs; raised by Thomas Barker, of Monroe county, Mo., sold for \$165. Market declining. Fair demand for shipping qualities, but no facilities in sending forward.—Butchers pay 4 to 5 1-2. Only a few head in the yards at 3 o'clock, in the neighborhood at least 500.

SHEEP.—Sale of 137 head at \$3 20—the only lot in for two weeks.

Hogs Sale of 540 head, in lots, at \$4:320, 75 and 294 do at same, net—weighing from 200 to 225.

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